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- ☐ 1: Drew JE, Barrett P, Mercer JG, Moar KM, Canet E, Delagrang P, Morgan PJ. Related Articles, Links

Localization of the melatonin-related receptor in the rodent brain and peripheral tissues.

J Neuroendocrinol. 2001 May;13(5):453-8.

PMID: 11328456 [PubMed - indexed for MEDLINE]

- ☐ 2: Conway S, Drew JE, Mowat ES, Barrett P, Delagrang P, Morgan PJ. Related Articles, Links

Chimeric melatonin mt1 and melatonin-related receptors. Identification of domains and residues participating in ligand binding and receptor activation of the melatonin mt1 receptor.

J Biol Chem. 2000 Jul 7;275(27):20602-9.

PMID: 10770942 [PubMed - indexed for MEDLINE]

- ☐ 3: Gubitz AK, Reppert SM. Related Articles, Links

Assignment of the melatonin-related receptor to human chromosome X (GPR50) and mouse chromosome X (Gpr50).

Genomics. 1999 Jan 15;55(2):248-51.

PMID: 9933574 [PubMed - indexed for MEDLINE]

- ☐ 4: Drew JE, Barrett P, Williams LM, Conway S, Morgan PJ. Related Articles, Links

The ovine melatonin-related receptor: cloning and preliminary distribution and binding studies.

J Neuroendocrinol. 1998 Sep;10(9):651-61.

PMID: 9744482 [PubMed - indexed for MEDLINE]

- ☐ 5: Weaver DR, Reppert SM. Related Articles, Links

The Mella melatonin receptor gene is expressed in human suprachiasmatic nuclei.

Neuroreport. 1996 Dec 20;8(1):109-12.

PMID: 9051762 [PubMed - indexed for MEDLINE]

- ☐ 6: Reppert SM, Weaver DR, Ebisawa T, Mahle CD, Kolakowski LF Jr. Related Articles, Links

Cloning of a melatonin-related receptor from human pituitary.

FEBS Lett. 1996 May 20;386(2-3):219-24.

PMID: 8647286 [PubMed - indexed for MEDLINE]

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L16	MRR	434	L16
L15	melatonin-related	1	L15
L14	L13 AND bone	38	L14
L13	L12 AND g-protein	93	L13
L12	(melatonin AND receptor)	525	L12
L11	L10 AND receptor	48	L11
L10	L4 AND melatonin	50	L10
L9	L8 AND melatonin-related	0	L9
L8	L7 AND receptor	36	L8
L7	L6 AND melatonin	36	L7
L6	((536/23.5)!.CCLS.)	5488	L6
L5	L4 AND melatonin-related	0	L5
L4	((530/300 530/350 530/388.1)!.CCLS.)	11165	L4
L3	L2 AND melatonin-related-receptor	0	L3
L2	((435/6 435/7.1 435/69.1 435/320.1 435/325)!.CCLS.)	34413	L2
L1	(White-David.IN.)	22	L1

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=> s melatonin-related receptor
10661 MELATONIN
14 MELATONINS
10663 MELATONIN
(MELATONIN OR MELATONINS)
860576 RELATED
2 RELATEDS
860577 RELATED
(RELATED OR RELATEDS)
502195 RECEPTOR
459061 RECEPTORS
598141 RECEPTOR
(RECEPTOR OR RECEPTORS)
L1 8 MELATONIN-RELATED RECEPTOR
(MELATONIN(W)RELATED(W)RECEPTOR)
=> D L1 1-8

L1 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS
AN 2003:80190 CAPLUS
TI Expression of MT1 and ***melatonin*** ***related***
receptor (H9) in adult rat testis
AU De Rienzo, G.; Aniello, F.; Ferrara, D.; Minucci, S.; Serino, I.;
D'istria, M.
CS Dipartimento di Medicina Sperimentale, Naples, Italy
SO Perspective in Comparative Endocrinology: Unity and Diversity,
[International Congress of Comparative Endocrinology], 14th, Sorrento,
Italy (2001), 1075-1079. Editor(s): Goos, H. J. Th. Publisher: Monduzzi
Editore, Bologna, Italy.
CODEN: 69DLOV; ISBN: 88-323-1526-2
DT Conference
LA English
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS
AN 2001:317578 CAPLUS
DN 135:693
TI Localization of the ***melatonin*** - ***related*** ***receptor***
in the rodent brain and peripheral tissues
AU Drew, J. E.; Barrett, P.; Mercer, J. G.; Moar, K. M.; Canet, E.;
Delagrang, P.; Morgan, P. J.
CS Molecular Neuroendocrinology Group, Rowett Research Institute, Aberdeen,
AB21 9SB, UK
SO Journal of Neuroendocrinology (2001), 13(5), 453-458
CODEN: JOUNE2; ISSN: 0953-8194
PB Blackwell Science Ltd.
DT Journal
LA English
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS
AN 2001:101358 CAPLUS
DN 134:161450
TI MRR gene, cDNA, and protein, and methods for prognostication, diagnosis,
prevention, and treatment of bone-related disorders
IN white, David
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001009383	A2	20010208	WO 2000-US20524	20000728
	WO 2001009383	A3	20020711		
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LU, LV, MA, MD, ME, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1235931 A2 20020904 EP 2000-950806 20000728

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL

PRAI US 1999-146614P P 19990730
WO 2000-US20524 W 20000728

L1 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS

AN 2000:488229 CAPLUS

DN 133:188070

TI Chimeric melatonin mtl and ***melatonin*** - ***related***
receptors. Identification of domains and residues participating in
ligand binding and receptor activation of the melatonin mtl receptor

AU Conway, Shaun; Drew, Janice E.; Mowat, Elaine S.; Barrett, Perry;
Delagrang, Philippe; Morgan, Peter J.

CS Molecular Neuroendocrinology Group, Division of Appetite and Energy
Balance, Rowett Research Institute, Aberdeen, AB21 9SB, UK

SO Journal of Biological Chemistry (2000), 275(27), 20602-20609

CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS

AN 1999:148497 CAPLUS

DN 130:333504

TI Assignment of the ***melatonin*** - ***related*** ***receptor***
to human chromosome X (GPR50) and mouse chromosome X (Gpr50)

AU Gubitz, Amelie K.; Reppert, Steven M.

CS Laboratory Developmental Chronobiology, Pediatric Service, Massachusetts
General Hospital & Harvard Medical School, Boston, MA, 02114, USA

SO Genomics (1999), 55(2), 248-251

CODEN: GNMCEP; ISSN: 0888-7543

PB Academic Press

DT Journal

LA English

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS

AN 1998:593007 CAPLUS

DN 129:310991

TI The ovine ***melatonin*** - ***related*** ***receptor*** :
cloning and preliminary distribution and binding studies

AU Drew, Janice E.; Barrett, Perry; Williams, Lynda M.; Conway, Shaun;
Morgan, Peter J.

CS Molecular Neuroendocrinology Unit, Rowett Research Institute, Aberdeen,
AB21 9SB, UK

SO Journal of Neuroendocrinology (1998), 10(9), 651-661

CODEN: JOUNE2; ISSN: 0953-8194

PB Blackwell Science Ltd.

DT Journal

LA English

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2003 ACS

AN 1997:193686 CAPLUS

DN 126:207692

TI The Mella melatonin receptor gene is expressed in human suprachiasmatic
nuclei

AU Weaver, David R.; Reppert, Steven M.

CS Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital, Boston, MA, 02114, USA

SO NeuroReport (1996), 8(1), 109-112

CODEN: NERPEZ; ISSN: 0959-4965

PB Rapid Science Publishers

DT Journal

LA English
L1 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS
AN 1996:361438 CAPLUS
DN 125:108057
TI Cloning of a ***melatonin*** - ***related*** ***receptor*** from
human pituitary
AU Reppert, Steven M.; Weaver, David R.; Ebisawa, Takashi; Mahle, Cathy D.;
Kolakowski, Lee F.
CS Laboratory of Developmental Chronobiology, Massachusetts General Hospital
and Harvard Medical School, Jackson 1226, Boston, MA, 02114, USA
SO FEBS Letters (1996), 386(2,3), 219-224
CODEN: FEBLAL; ISSN: 0014-5793
PB Elsevier
DT Journal
LA English

=> file MEDLINE
=> s melatonin-related receptor
9997 MELATONIN
4 MELATONINS
9997 MELATONIN
(MELATONIN OR MELATONINS)
721653 RELATED
1 RELATEDS
721653 RELATED
(RELATED OR RELATEDS)
414219 RECEPTOR
454219 RECEPTORS
587828 RECEPTOR
(RECEPTOR OR RECEPTORS)
L2 6 MELATONIN-RELATED RECEPTOR
(MELATONIN(W)RELATED(W)RECEPTOR)

=> D L2 1-6

L2 ANSWER 1 OF 6 MEDLINE
AN 2001370716 MEDLINE
DN 21226420 PubMed ID: 11328456
TI Localization of the ***melatonin*** - ***related*** ***receptor***
in the rodent brain and peripheral tissues.
AU Drew J E; Barrett P; Mercer J G; Moar K M; Canet E; Delagrangre P; Morgan P
J
CS Molecular Neuroendocrinology Group, Rowett Research Institute, Bucksburn,
Aberdeen, UK.. jed@rri.sari.ac.uk
SO JOURNAL OF NEUROENDOCRINOLOGY, (2001 May) 13 (5) 453-8.
Journal code: 8913461. ISSN: 0953-8194.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200106
ED Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

L2 ANSWER 2 OF 6 MEDLINE
AN 2000396588 MEDLINE
DN 20347149 PubMed ID: 10770942
TI Chimeric melatonin mtl and ***melatonin*** - ***related***
receptors. Identification of domains and residues participating in
ligand binding and receptor activation of the melatonin mtl receptor.
AU Conway S; Drew J E; Mowat E S; Barrett P; Delagrangre P; Morgan P J
CS Molecular Neuroendocrinology Group, Division of Appetite and Energy
Balance, Rowett Research Institute, Greenburn Road, Bucksburn, Aberdeen
AB21 9SB, United Kingdom.. sco@rri.sari.ac.uk
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (2000 Jul 7) 275 (27) 20602-9.
Journal code: 2985121R. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200008
ED Entered STN: 20000824
Last Updated on STN: 20000824
Entered Medline: 20000816

L2 ANSWER 3 OF 6 MEDLINE
 AN 1999134305 MEDLINE
 DN 99134305 PubMed ID: 9933574
 TI Assignment of the ***melatonin*** - ***related*** ***receptor***
 to human chromosome X (GPR50) and mouse chromosome X (Gpr50).
 AU Gubitza A K; Reppert S M
 CS Pediatric Service, Massachusetts General Hospital and Harvard Medical
 School, Boston, Massachusetts, 02114, USA.
 NC DK42125 (NIDDK)
 SO GENOMICS, (1999 Jan 15) 55 (2) 248-51.
 Journal code: 8800135. ISSN: 0888-7543.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 OS GENBANK-AF065145; GENBANK-U52219
 EM 199909
 ED Entered STN: 19990921
 Last Updated on STN: 19990921
 Entered Medline: 19990903

L2 ANSWER 4 OF 6 MEDLINE
 AN 1998415731 MEDLINE
 DN 98415731 PubMed ID: 9744482
 TI The ovine ***melatonin*** - ***related*** ***receptor*** :
 cloning and preliminary distribution and binding studies.
 AU Drew J E; Barrett P; Williams L M; Conway S; Morgan P J
 CS Molecular Neuroendocrinology Unit, Rowett Research Institute, Bucksburn,
 Aberdeen, UK.
 SO JOURNAL OF NEUROENDOCRINOLOGY, (1998 Sep) 10 (9) 651-61.
 Journal code: 8913461. ISSN: 0953-8194.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199812
 ED Entered STN: 19990115
 Last Updated on STN: 19990115
 Entered Medline: 19981204

L2 ANSWER 5 OF 6 MEDLINE
 AN 97204190 MEDLINE
 DN 97204190 PubMed ID: 9051762
 TI The Mella melatonin receptor gene is expressed in human suprachiasmatic
 nuclei.
 AU Weaver D R; Reppert S M
 CS Laboratory of Developmental Chronobiology, Massachusetts General Hospital,
 Boston 02114, USA.
 NC HD 14227 (NICHD)
 N01-HD-1-3138 (NICHD)
 SO NEUROREPORT, (1996 Dec 20) 8 (1) 109-12.
 Journal code: 9100935. ISSN: 0959-4965.
 CY ENGLAND: United Kingdom
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199705
 ED Entered STN: 19970602
 Last Updated on STN: 19970602
 Entered Medline: 19970520

L2 ANSWER 6 OF 6 MEDLINE
 AN 96228068 MEDLINE
 DN 96228068 PubMed ID: 8647286
 TI Cloning of a ***melatonin*** - ***related*** ***receptor*** from
 human pituitary.
 AU Reppert S M; Weaver D R; Ebisawa T; Mahle C D; Kolakowski L F Jr
 CS Laboratory of Developmental Chronobiology, Massachusetts General Hospital,
 Boston, MA 02114, . USA.reppert@helix.mgh.harvard.edu
 NC R37 HD14427 (NICHD)
 SO FEBS LETTERS, (1996 May 20) 386 (2-3) 219-24.
 Journal code: 0155157. ISSN: 0014-5793.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English

FS Priority Journals
OS GENBANK-U25341; GENBANK-U18; GENBANK-U52219; GENBANK-U50;
GENBANK-U52221
EM 199607
ED Entered STN: 19960805
Last Updated on STN: 20000303
Entered Medline: 19960725

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21 FILES SEARCHED...
41 FILES SEARCHED...
L3 72 MELATONIN-RELATED RECEPTOR

=> DUP REM L3
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DRUGLAUNCH, DRUGMONOG2, DRUGUPDATES, FEDRIP, FOREGE, GENBANK, KOSMET,
MEDICONF, NUTRACEUT, PHAR, PHARMAML, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L3
L4 29 DUP REM L3 (43 DUPLICATES REMOVED)

=> D L4 1-29

L4 ANSWER 1 OF 29 USPATFULL
AN 2002:346979 USPATFULL
TI Composition for the detection of signaling pathway gene expression
IN Au-Young, Janice, Berkeley, CA, United States
Seilhamer, Jeffrey J., Los Altos Hills, CA, United States
PA Incyte Genomics, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6500938 B1 20021231
AI US 1998-16434 19980130 (9)
DT Utility

FS GRANTED
LN.CNT 6180
INCL INCLM: 536/023.100
INCLS: 422/050.000; 422/068.100; 435/006.000; 436/501.000; 536/024.100;
536/024.300; 536/024.310; 536/024.320; 536/024.330
NCL NCLM: 536/023.100
NCLS: 422/050.000; 422/068.100; 435/006.000; 436/501.000; 536/024.100;
536/024.300; 536/024.310; 536/024.320; 536/024.330
IC [7]
ICM: C07H021-00
ICS: C07H021-04; C12Q001-68
EXF 435/6; 435/69.1; 422/50; 422/68.1; 436/501; 536/23.1; 536/24.1;
536/24.3-24.33
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
AN 2001:101358 CAPLUS
DN 134:161450
TI MRR gene, cDNA, and protein, and methods for prognostication, diagnosis,
prevention, and treatment of bone-related disorders
IN White, David
PA Millennium Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009383	A2	20010208	WO 2000-US20524	20000728
WO 2001009383	A3	20020711		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1235931	A2	20020904	EP 2000-950806	20000728
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI US 1999-146614P	P	19990730		
WO 2000-US20524	W	20000728		

L4 ANSWER 3 OF 29 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 2001-07265 BIOTECHDS
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent;
vector-mediated gene transfer, expression in host cell, antibody,
agonist, antagonist, DNA probe, DNA primer, antisense oligonucleotide,
antibody and transgenic animal for diagnosis and gene therapy
AU white D
PA Millennium-Pharm.
LO Cambridge, MA, USA.
PI WO 2001009383 8 Feb 2001
AI WO 2000-US20524 28 Jul 2000
PRAI US 1999-146614 30 Jul 1999
DT Patent
LA English
OS WPI: 2001-182979 [18]

L4 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2003 ACS
AN 2003:80190 CAPLUS
TI Expression of MT1 and ***melatonin*** ***related***
receptor (H9) in adult rat testis
AU De Rienzo, G.; Aniello, F.; Ferrara, D.; Minucci, S.; Serino, I.;
D'istria, M.
CS Dipartimento di Medicina Sperimentale, Naples, Italy
SO Perspective in Comparative Endocrinology: Unity and Diversity,
[International Congress of Comparative Endocrinology], 14th, Sorrento,
Italy (2001), 1075-1079. Editor(s): Goos, H. J. Th. Publisher: Monduzzi
Editore, Bologna, Italy.

DT Conference
LA EnglishRE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 5 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
2
AN 2001:261666 BIOSIS
DN PREV200100261666
TI Localization of the ***melatonin*** - ***related*** ***receptor***
in the rodent brain and peripheral tissues.
AU Drew, J. E. (1); Barrett, P.; Mercer, J. G.; Moar, K. M.; Canet, E.;
Delagrang, P.; Morgan, P. J.
CS (1) Molecular Neuroendocrinology Group, Rowett Research Institute,
Bucksburn, Aberdeen, AB21 9SB: jed@rri.sari.ac.uk UK
SO Journal of Neuroendocrinology, (May, 2001) Vol. 13, No. 5, pp. 453-458.
print.
ISSN: 0953-8194.
DT Article
LA English
SL English
- L4 ANSWER 6 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
3
AN 2000:403044 BIOSIS
DN PREV200000403044
TI Chimeric melatonin mtl and ***melatonin*** - ***related***
receptors : Identification of domains and residues participating in
ligand binding and receptor activation of the melatonin mtl receptor.
AU Conway, Shaun (1); Drew, Janice E.; Mowat, Elaine S.; Barrett, Perry;
Delagrang, Philippe; Morgan, Peter J.
CS (1) Molecular Neuroendocrinology Group, Div. of Appetite and Energy
Balance, Rowett Research Inst., Greenburn Rd., Bucksburn, Aberdeen, AB21
9SB UK
SO Journal of Biological Chemistry, (July 7, 2000) vol. 275, No. 27, pp.
20602-20609. print.
ISSN: 0021-9258.
DT Article
LA English
SL English
- L4 ANSWER 7 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:509650 BIOSIS
DN PREV199900509650
TI Genetic and transcription analysis in Rett syndrome.
AU Manzati, E. (1); Bigoni, S. (1); Gualandi, F. (1); Scapoli, C.; Guarna,
M.; Pini, G.; Zappella, M.; Muntoni, F.; Hajek, G.; Calzolari, E. (1);
Ferlini, A. (1)
CS (1) Istituto di Genetica Medica, Universita' di Ferrara, Ferrara Italy
SO American Journal of Human Genetics, (Oct., 1999) vol. 65, No. 4, pp. A478.
Meeting Info.: 49th Annual Meeting of the American Society of Human
Genetics San Francisco, California, USA October 19-23, 1999 The American
Society of Human Genetics
. ISSN: 0002-9297.
DT Conference
LA English
- L4 ANSWER 8 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
4
AN 1999:145651 BIOSIS
DN PREV199900145651
TI Short communication: Assignment of the ***melatonin*** - ***related***
receptor to human chromosome X (GPR50) and mouse chromosome X
(Gpr50).
AU Gubitz, Amelie K.; Reppert, Steven M. (1)
CS (1) Jackson 1226, Massachusetts General Hospital, Boston, MA 02114 USA
SO Genomics, (Jan. 15, 1999) vol. 55, No. 2, pp. 248-251.
ISSN: 0888-7543.
DT Article
LA English
- L4 ANSWER 9 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
5
AN 1998:446531 BIOSIS
DN PREV199800446531

TI The ovine ***melatonin*** - ***related*** ***receptor*** :
Cloning and preliminary distribution and binding studies.
AU Drew, Janice E. (1); Barrett, Perry; Williams, Lynda M.; Conway, Shaun;
Morgan, Peter J.
CS (1) Neuroendocrinology, Rowett Res. Inst., Greenburn Road, Bucksburn,
Aberdeen AB21 9SB UK
SO Journal of Neuroendocrinology, (Sept., 1998) vol. 10, No. 9, pp. 651-661.
ISSN: 0953-8194.
DT Article
LA English

L4 ANSWER 10 OF 29 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.DUPLICATE
AN 1997:27183394 BIOTECHNO
TI The Mel(1a) melatonin receptor gene is expressed in human suprachiasmatic
nuclei
AU Weaver D.R.; Reppert S.M.
CS D.R. Weaver, Lab. of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital, Boston, MA 02114, United States.
SO NeuroReport, (1997), 8/1 (109-112), 22 reference(s)
CODEN: NERPEZ ISSN: 0959-4965
DT Journal; Article
CY United Kingdom
LA English
SL English

L4 ANSWER 11 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE
7
AN 1996:282009 BIOSIS
DN PREV199699004365
TI Cloning of a ***melatonin*** - ***related*** ***receptor*** from
human pituitary.
AU Reppert, Steven M. (1); Weaver, David R.; Ebisawa, Takashi; Mahle, Cathy
D.; Kolakowski, Lee F., Jr.
CS (1) Lab. Dev. Chronobiol., Massaschusetts General Hosp., Jackson 1226,
Boston, MA 02114 USA
SO FEBS Letters, (1996) Vol. 386, No. 2-3, pp. 219-224.
ISSN: 0014-5793.
DT Article
LA English

L4 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 8
AN 1997:193686 CAPLUS
DN 126:207692
TI The Mella melatonin receptor gene is expressed in human suprachiasmatic
nuclei
AU Weaver, David R.; Reppert, Steven M.
CS Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital, Boston, MA, 02114, USA
SO NeuroReport (1996), 8(1), 109-112
CODEN: NERPEZ; ISSN: 0959-4965
PB Rapid Science Publishers
DT Journal
LA English

L4 ANSWER 13 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAB61991 Protein DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -
IN white D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208 107p
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

L4 ANSWER 14 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAB61990 Protein DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -
IN white D

PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

107p

L4 ANSWER 15 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAB61989 Protein DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN white D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

107p

L4 ANSWER 16 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAF57098 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN white D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

107p

L4 ANSWER 17 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAF57097 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN white D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

107p

L4 ANSWER 18 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAF57096 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN white D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

107p

L4 ANSWER 19 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAC85198 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN white D
PA (MILL-N) MILLENNIUM PHARM INC.

PI WO 2001009383 A2 20010208 107p
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

L4 ANSWER 20 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAC85197 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN White D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208 107p
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

L4 ANSWER 21 OF 29 DGENE (C) 2003 THOMSON DERWENT
AN AAC85196 DNA DGENE
TI Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a ***melatonin*** - ***related***
receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding
agent -

IN White D
PA (MILL-N) MILLENNIUM PHARM INC.
PI WO 2001009383 A2 20010208 107p
AI WO 2000-US20524 20000728
PRAI US 1999-146614 19990730
DT Patent
LA English
OS 2001-182979 [18]

L4 ANSWER 22 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): AF065145 GenBank (R)
GenBank ACC. NO. (GBN): AF065145
GenBank VERSION (VER): AF065145.1 GI:3211764
CAS REGISTRY NO. (RN): 208227-83-2
SEQUENCE LENGTH (SQL): 1801
MOLECULE TYPE (CI): mRNA; linear
DIVISION CODE (CI): Rodents
DATE (DATE): 2 Mar 1999
DEFINITION (DEF): Mus musculus ***melatonin*** - ***related***
receptor (Gpr50) mRNA, complete cds.
SOURCE: house mouse.
ORGANISM (ORGN): Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Euteleostomi; Mammalia; Eutheria; Rodentia;
Sciurognathi; Muridae; Murinae; Mus
NUCLEIC ACID COUNT (NA): 369 a 565 c 388 g 479 t
COMMENT:

On Jun 11, 1998 this sequence version replaced gi:3152691.

REFERENCE: 1 (bases 1 to 1801)
AUTHOR (AU): Gubitza, A.K.; Reppert, S.M.
TITLE (TI): Assignment of the ***melatonin*** - ***related***
receptor to human chromosome X (GPR50) and
mouse chromosome X (Gpr50)
JOURNAL (SO): Genomics, 55 (2), 248-251 (1999)
OTHER SOURCE (OS): CA 130:333504
REFERENCE: 2 (bases 1 to 1801)
AUTHOR (AU): Gubitza, A.K.; Reppert, S.M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (13-MAY-1998) Laboratory of Developmental
Chronobiology, Massachusetts General Hospital, 32 Fruit
Street, Boston, MA 02114, USA
REFERENCE: 3 (bases 1 to 1801)
AUTHOR (AU): Gubitza, A.K.; Reppert, S.M.
TITLE (TI): Direct Submission
JOURNAL (SO): Submitted (10-JUN-1998) Laboratory of Developmental
Chronobiology, Massachusetts General Hospital, 32 Fruit
Street, Boston, MA 02114, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1801	/organism="Mus musculus" /db-xref="taxon:10090" /chromosome="X"
gene	1..1801	/gene="Gpr50"
CDS	26..1801	/gene="Gpr50" /codon-start=1 /product="melatonin-related receptor" /protein-id="AAC21462.1" /db-xref="GI:3211765" /translation="MATVPKSNMGPTKAVPTPFG CIGCKLPKPDYPPALIIFMFCAMV ITVVVDLIGNSMVILAVTKNKKLRNSGNI FVASL SVADMLVAIYPYPLMLYAMSVGGW DLSQLQCQMVGLVTGLSVVGSIFNITAIINRYC YICHSLQYKRIFSLRNTCIYLVVT WVMTVLAVLPNMYIGTIEYDPRTYTCIFNYVNNP AFTVTIVCIHFVLP LIIVGYCYTK IWIKVLAARDPAGQNPDPNQFAEVRNFLTMFVIFL LFAVCWCVPVNLTVLVAVIPKEMA GKIPNWLYLAAYCIAFYFNSCLNAIIYGILNESFR REYWTIFHAMRHPILFISHLISDI RETWETRALTRARVRARDQVREQERARACVAVEG TPRNVNRVLLPGDASAPHSDRASV RPKPQTRSTS SVYRKPA SIHHKSI SGHPKSASVYP KPASSVHCKPASVHF KPASVHFKG DSVYFKGDTVHYRAASKLVTS HRISAGPSTSHPT SMAGYIKSGTSHPATTTVDYLEPA TTSHSVLTAVDLPEVSASHCLEMTSTGHLRADIS ASVLPSPFELAATPPDTTAIPIA SGDYRKVVLI DDDSDSDSDCSEMAV"

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1741 ggctgctgctt attgatgatg attctgatga ttctgattgc tctgatgaga tggctgtgtg
1801 a

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L4 ANSWER 23 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): AF047829 GenBank (R)
 GenBank ACC. NO. (GBN): AF047829
 GenBank VERSION (VER): AF047829.1 GI:2909873
 CAS REGISTRY NO. (RN): 204662-04-4
 SEQUENCE LENGTH (SQL): 1728

MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Other mammals
 DATE (DATE): 24 Feb 1998
 DEFINITION (DEF): Ovis aries ***melatonin*** - ***related***
 receptor mRNA, complete cds.
 SOURCE: sheep.
 ORGANISM (ORGN): Ovis aries
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Cetartiodactyla;
 Ruminantia; Pecora; Bovoidea; Bovidae; Caprinae; Ovis
 NUCLEIC ACID COUNT (NA): 347 a 561 c 367 g 453 t
 REFERENCE: 1 (bases 1 to 1728)
 AUTHOR (AU): Drew, J.E.; Barrett, P.; Williams, L.M.; Conway, S.;
 Morgan, P.J.
 TITLE (TI): The ovine ***melatonin*** - ***related***
 receptor : cloning and preliminary distribution
 and binding studies
 JOURNAL (SO): J. Neuroendocrinol. (1998) In press
 REFERENCE: 2 (bases 1 to 1728)
 AUTHOR (AU): Drew, J.E.; Barrett, P.; Williams, L.M.; Conway, S.;
 Morgan, P.J.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (12-FEB-1998) Molecular Neuroendocrinology,
 Rowett Research Institute, Greenburn Road, Aberdeen
 AB21 9SB, Scotland

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1728	/organism="Ovis aries"
		/db-xref="taxon:9940"
CDS	1..1728	/codon-start=1
		/product="melatonin-related receptor"
		/protein-id="AAC04275.1"
		/db-xref="GI:2909874"
		/translation="MGRTLAVPTPYGCGICKLPQ PDYPPALIVFMFCAMVITIVVDLI GNSMVILAVSKNKKLRNSGNVSVLSVADMLVA IYPYPLMLHAMAIGWDLSKLQCC MVGFITGLSVVGSIFNIMAIAINRYCYICHSLQY ERIFSVRNTCIYLAVTWIMTVLAV LPNMYIGTIEYDPRTYTCIFNYVNNPAFAVTIVC IHFVPLLLIVGFCYVKIWKVLAA RDPAGQNPNDQLAEVRNFLTMEVIFLLFAVCWCP INALTVLVAVNPKEMAGKIPNWVY LAAYFIAFYNSCLNAVYGVLENFRREYWTIFH AMRHPVFLSGLLTDVREMGEAQA HTHARARARTQAHEQDHAHACPAVEEIPMSVRNV PLPGHGAAGQPECVSGHPKPASGH SRSVSARRKSASAHPKSASGQSKSATVYPKPTSV HFKPSSVYFKADSVYFKPSSSHPK PITGPSKTAISPATSFPKPTTGTYQHATIHSEPT TLDYLEPITTSKSPVIAHSELA ASCHLECNIFDLSPTSSPASDSSNSAASLLDPT AAAAATVNPTVTTDYHEIVLIDV DADSDMAV"

SEQUENCE (SEQ):

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601 ctgctcatag tgggtttctg ctacgtgaag atctggacca aagtgtctggc agcccgtgac
661 cctgctggac agaaccgga caaccagctt gctgagggtt gaaattttct aaccatggtt
721 gtgatcttcc tcctctttgc agtgtgctgg tgccctatca atgcgctcac tgttctggtg
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 1621 cctaccgctg ccgctgtctg cactgttaac cccactgtgg tcaccactga ttaccatgag
 1681 attgtgctta ttgatgttga tgctgattct gatgaaatgg ctgtgtaa

L4 ANSWER 24 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): OAU52221 GenBank (R)
 GenBank ACC. NO. (GBN): U52221
 GenBank VERSION (VER): U52221.1 GI:1326158
 CAS REGISTRY NO. (RN): 176893-01-9
 SEQUENCE LENGTH (SQL): 348
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Other mammals
 DATE (DATE): 28 Jul 1996
 DEFINITION (DEF): Ovis aries ***melatonin*** - ***related***
 receptor mRNA, partial cds.
 SOURCE: sheep.
 ORGANISM (ORGN): Ovis aries
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Cetartiodactyla;
 Ruminantia; Pecora; Bovoidea; Bovidae; Caprinae; Ovis
 NUCLEIC ACID COUNT (NA): 73 a 103 c 69 g 103 t
 REFERENCE: 1 (bases 1 to 348)
 AUTHOR (AU): Reppert,S.M.; Weaver,D.R.; Ebisawa,T.; Mahle,C.D.;
 Kolakowski,L.F. Jr.
 TITLE (TI): Cloning of a ***melatonin*** - ***related***
 receptor from human pituitary
 JOURNAL (SO): FEBS Lett., 386 (2-3), 219-224 (1996)
 OTHER SOURCE (OS): CA 125:108057
 REFERENCE: 2 (bases 1 to 348)
 AUTHOR (AU): Reppert,S.M.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (25-MAR-1996) Steven M. Reppert, Pediatrics,
 Massachusetts General Hospital, Fruit Street, Boston,
 MA 02114, USA

FEATURES (FEAT):	Feature Key	Location	Qualifier
source	1..348		/organism="Ovis aries" /db-xref="taxon:9940" /clone="s2-1"
CDS	<1..>348		/codon-start=1 /product="melatonin-related receptor" /protein-id="AAC48609.1" /db-xref="GI:1326159" /translation="CYICHSLQYELIFSVRNTCI YLAVTWIMTVMAVLPNMYIGTIEY DPRITYTCIFNYVNNPAFAVTIVCIHFVLP LLIVG FCYVKIWTKVLADPAGQNPQNQLA EVRNFLTMEFVIFLL"

SEQUENCE (SEQ):
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 121 accatcgagt atgatcctcg cacctacacc tgcattctta actatgtgaa caaccctgcc
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 241 tatgtgaaga tctggaccaa agtgctggca gaccctgtg gacagaaccc ggacaaccag
 301 cttgctgagg ttcgaaattt tctaaccatg tttgtgatct tcctcctc

L4 ANSWER 25 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): DRU52220 GenBank (R)
 GenBank ACC. NO. (GBN): U52220
 GenBank VERSION (VER): U52220.1 GI:1326156
 CAS REGISTRY NO. (RN): 176893-00-8

SEQUENCE LENGTH (SQL): 471
 MOLECULE TYPE (CI): mRNA; near
 DIVISION CODE (CI): Other vertebrates
 DATE (DATE): 28 Jul 1996
 DEFINITION (DEF): Danio rerio Mel-1b melatonin receptor mRNA, partial cds.
 SOURCE: zebrafish.
 ORGANISM (ORGN): Danio rerio
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Actinopterygii; Neopterygii; Teleostei;
 Ostariophysi; Cypriniformes; Cyprinidae; Danio
 NUCLEIC ACID COUNT (NA): 75 a 122 c 130 g 144 t
 REFERENCE: 1 (bases 1 to 471)
 AUTHOR (AU): Reppert,S.M.; Weaver,D.R.; Ebisawa,T.; Mahle,C.D.;
 Kolakowski,L.F. Jr.
 TITLE (TI): Cloning of a ***melatonin*** - ***related***
 receptor from human pituitary
 JOURNAL (SO): FEBS Lett., 386 (2-3), 219-224 (1996)
 OTHER SOURCE (OS): CA 125:108057
 REFERENCE: 2 (bases 1 to 471)
 AUTHOR (AU): Reppert,S.M.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (25-MAR-1996) Steven M. Reppert, Pediatrics,
 Massachusetts General Hospital, Fruit Street, Boston,
 MA 02114, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..471	/organism="Danio rerio" /db-xref="taxon:7955" /clone="z6.2"
CDS	<1..>471	/codon-start=1 /product="Mel-1b melatonin receptor" /protein-id="AAC59913.1" /db-xref="GI:1326157" /translation="YCFICQANTYEKIYGRAGTL VLLTLVWVLTAIAILPNLSLGLSLT YDPRVYSCTFSQTTAGYTIADVTVHFLPIAVV TFCYLRIWVVLVLRVRRRVTTDVRP RLRPSELRHFLTMFVVFVLFVAVCWAPLNLI GLAV AVDPPRVGPLVPDWLFVMSYF"

SEQUENCE (SEQ):

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L4 ANSWER 26 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): HSU52219 GenBank (R)
 GenBank ACC. NO. (GBN): U52219
 GenBank VERSION (VER): U52219.1 GI:1326154
 CAS REGISTRY NO. (RN): 391790-11-7
 SEQUENCE LENGTH (SQL): 1939
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 28 Jul 1996
 DEFINITION (DEF): Human ***melatonin*** - ***related***
 receptor mRNA, complete cds.
 SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo
 NUCLEIC ACID COUNT (NA): 384 a 643 c 428 g 484 t
 REFERENCE: 1 (bases 1 to 1939)
 AUTHOR (AU): Reppert,S.M.; Weaver,D.R.; Ebisawa,T.; Mahle,C.D.;
 Kolakowski,L.F. Jr.
 TITLE (TI): Cloning of a ***melatonin*** - ***related***

receptor from human pituitary

JOURNAL (SO): FEBS Lett., 386 (2-3), 219-224 (1996)
 OTHER SOURCE (OS): CA 125:108057
 REFERENCE: 2 (bases 1 to 1939)
 AUTHOR (AU): Reppert, S.M.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (25-MAR-1996) Steven M. Reppert, Pediatrics,
 Massachusetts General Hospital, Fruit Street, Boston,
 MA 02114, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
source	1..1939	/organism="Homo sapiens" /db-xref="taxon:9606" /clone="H9" /tissue-type="pituitary" /dev-stage="adult"
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CDS	70..1911	/codon-start=1 /product="melatonin-related receptor" /protein-id="AAC50614.1" /db-xref="GI:1326155" /translation="MGPTLAVPTPYGCIGCKLPQ PEYPPALIIIFMFCAMVITIVVDLI GNSMVILAVTKNKKLRNSGNIFVVSLSVADMLVA IYPYPLMLHAMSIGGWDLSQLQCQ MVGFITGLSVVGSIFNIVAIAINRYCYICHSLQY ERIFSVRNTCIYLVITWIMTVLAV LPNMYIGTIEYDPRYTCIFNYLNNPVFTVTIVC IHFVLP LLIVGFCYVRIWTKVLAA RDPAGQNPNDQLAEVRNFLT MFVIFLLFAVCWCP INVLTVLVAVSPKEMAGKIPNWL LAAYFIAYFNSCLNAVIYGLLNENFRREYWTIFH AMRHPIIFFPGLISDIEMQEART LARARAHARDQAREQDRAHACPAVEETPMNVRNV PLPGDAAAGHPDRASGHPKPHSRS SSAYRKSASTHHKSVFHSKAASGHLKPVSGHSK PASGHPKSATVYPKPASVHFKGDS VHFKGDSVHFKPDSVHFKPASSNPKPITGHHVSA GSHSKSAFSAATSHPKPIKPATSH AEPTTADYPKPATTSHPKPAAADNPELSASHCPE IPAIAHPVSDDSDL PESASSPAAG PTKPAASQLES D TIADLPDPTVTTSTNDYHDVV VVDVEDDPDEMAV"
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 1921 tcgtagggtg ccaggcagt

L4 ANSWER 27 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): RNU52218 GenBank (R)
 GenBank ACC. NO. (GBN): U52218
 GenBank VERSION (VER): U52218.1 GI:1326152
 CAS REGISTRY NO. (RN): 389344-51-8
 SEQUENCE LENGTH (SQL): 357
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Rodents
 DATE (DATE): 28 Jul 1996
 DEFINITION (DEF): Rattus norvegicus ***melatonin*** - ***related***
 receptor mRNA, partial cds.
 SOURCE: Norway rat.
 ORGANISM (ORGN): Rattus norvegicus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Rodentia;
 Sciurognathi; Muridae; Murinae; Rattus
 NUCLEIC ACID COUNT (NA): 80 a 103 c 67 g 107 t
 REFERENCE: 1 (bases 1 to 357)
 AUTHOR (AU): Reppert,S.M.; Weaver,D.R.; Ebisawa,T.; Mahle,C.D.;
 Kolakowski,L.F. Jr.
 TITLE (TI): Cloning of a ***melatonin*** - ***related***
 receptor from human pituitary
 JOURNAL (SO): FEBS Lett., 386 (2-3), 219-224 (1996)
 OTHER SOURCE (OS): CA 125:108057
 REFERENCE: 2 (bases 1 to 357)
 AUTHOR (AU): Reppert,S.M.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (25-MAR-1996) Steven M. Reppert, Pediatrics,
 Massachusetts General Hospital, Fruit Street, Boston,
 MA 02114, USA

Feature Key	Location	Qualifier
source	1..357	/organism="Rattus norvegicus" /db-xref="taxon:10116" /clone="rmr-2"
CDS	<1..>357	/codon-start=1 /product="melatonin-related receptor" /protein-id="AAC52671.1" /db-xref="GI:1326153" /translation="YCYICHSLQYNADLQPANTC IYLVVTWVMTVLDVLPNVYIGTIE YDPRTYTCYFNYYNNPAFTVTIVCIHFVPLIIV GYCYTKIWKVLADRPAGQNPND QFAEVRNFLTMFVIFLL"

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L4 ANSWER 28 OF 29 GENBANK.RTM. COPYRIGHT 2003

LOCUS (LOC): HSU25341 GenBank (R)
 GenBank ACC. NO. (GBN): U25341
 GenBank VERSION (VER): U25341.1 GI:971193
 CAS REGISTRY NO. (RN): 384633-11-8
 SEQUENCE LENGTH (SQL): 1105
 MOLECULE TYPE (CI): mRNA; linear
 DIVISION CODE (CI): Primates
 DATE (DATE): 26 Jul 1996
 DEFINITION (DEF): Human Mel1b-melatonin receptor (MTNR1B) mRNA, complete
 cds.

SOURCE: human.
 ORGANISM (ORGN): Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
 Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini;
 Hominidae; Homo

NUCLEIC ACID COUNT (NA): 188 a 363 c 303 g 251 t

REFERENCE: 1 (bases 1 to 1105)
 AUTHOR (AU): Reppert,S.M.; Godson,C.; Mahle,C.D.; Weaver,D.R.;
 Gusella,J.F.
 TITLE (TI): Molecular characterization of a second melatonin
 receptor expressed in human retina and brain: the Mel1b
 melatonin receptor
 JOURNAL (SO): Proc. Natl. Acad. Sci. U.S.A., 92 (19), 8734-8738
 (1995)
 OTHER SOURCE (OS): CA 124:2009

REFERENCE: 2 (bases 1 to 1105)
 AUTHOR (AU): Reppert,S.M.; Weaver,D.R.; Ebisawa,T.; Mahle,C.D.;
 Kolakowski,L.F. Jr.
 TITLE (TI): Cloning of a ***melatonin*** - ***related***
 receptor from human pituitary
 JOURNAL (SO): FEBS Lett., 386 (2-3), 219-224 (1996)
 OTHER SOURCE (OS): CA 125:108057

REFERENCE: 3 (bases 1 to 1105)
 AUTHOR (AU): Reppert,S.M.; Godson,C.; Mahle,C.D.; Weaver,D.R.;
 Gusella,J.F.
 TITLE (TI): Direct Submission
 JOURNAL (SO): Submitted (19-APR-1995) Steven M. Reppert,
 Chronobiology, Mass. Gen. Hospital, GRJ 1226, 32 Fruit
 Street, Boston, MA 02114, USA

FEATURES (FEAT):

Feature Key	Location	Qualifier
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gene	1..1105	/gene="MTNR1B"
CDS	13..1101	/gene="MTNR1B" /note="member of G protein coupled receptor family" /codon-start=1 /product="Mel1b-melatonin receptor" /protein-id="AAC50612.1" /db-xref="GI:971194" /translation="MSENGSFANCCEAGGWAVRP GWSGAGSARPSRTPRPPWVAPALS AVLIVTTAVDVVGNLLVILSVLRNRKLRNAGNLF LVSLALADLVVAFYPYPLILVAIF YDGWALGEEHCKASAFVMGLSVIGSVFNITAI NRYCYICHSMAYHRIYRRWHTPLH ICLIWLLTVVALLPNFFVGSLEYDPRIYSCTFIQ TASTQYTAAVVVIHFLPIAVVSF CYLRIWVLVLQARRKAKPESRLCLKPSDLRSFLT MFVVFVIFAICWAPLNCIGLAVAI NPQEMAPQIPEGLFVTSYLLAYFNSCLNAIVYGL LNQNFRRREYKRILLALWNP RHCIQ DASKGSHAEG LQSPAPPIIGVQH QADAL"

SEQUENCE (SEQ):

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L4 ANSWER 29 OF 29 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1997:262607 BIOSIS
DN PREV199799569210
TI The Mel-1a melatonin receptor gene is expressed in human suprachiasmatic
nuclei.
AU Weaver, David R. (1); Reppert, Steven M.
CS (1) Lab. Developmental Chronobiol., Pediatric Service, Massachusetts Gen.
Hosp., Boston, MA 02114 USA
SO Neuroreport, Vol. 8, No. 1, pp. 109-112.
ISSN: 0959-4965.
DT Article
LA English
STN INTERNATIONAL LOGOFF AT 16:57:28 ON 28 FEB 2003

6 399: CA SEARCH(R)_1967-2002/UD=13710
16 440: Current Contents Search(R)_1990-2002/Sep 04
Examined 200 files
2 484: Periodical Abs Plustext_1986-2002/Aug W4
Examined 250 files

18 files have one or more items; file list includes 296 files.

?save temp

Temp SearchSave "TD156" stored

?b hits

04sep02 14:07:18 User300306 Session D431.6
\$6.90 3.941 DialUnits File411
\$6.90 Estimated cost File411
\$0.65 TELNET
\$7.55 Estimated cost this search
\$66.15 Estimated total session cost 9.310 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1969-2002/Sep W1

(c) 2002 BIOSIS

*File 5: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.

File 34:SciSearch(R) Cited Ref Sci 1990-2002/Sep W1

(c) 2002 Inst for Sci Info

*File 34: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.

File 50:CAB Abstracts 1972-2002/Jul

(c) 2002 CAB International

*File 50: Truncating CC codes is recommended for full retrieval. See Help News50 for details.

File 65:Inside Conferences 1993-2002/Sep W1

(c) 2002 BLDSC all rts. reserv.

File 71:ELSEVIER BIOBASE 1994-2002/Sep W1

(c) 2002 Elsevier Science B.V.

File 73:EMBASE 1974-2002/Aug W4

(c) 2002 Elsevier Science B.V.

*File 73: Alert feature enhanced for multiple files, duplicates removal, customized scheduling. See HELP ALERT.

File 76:Life Sciences Collection 1982-2002/Aug

(c) 2002 Cambridge Sci Abs

File 144:Pascal 1973-2002/Sep W1

(c) 2002 INIST/CNRS

File 155:MEDLINE(R) 1966-2002/Sep W1

*File 155: Alert feature enhanced for multiple files, duplicates

removal, customized scheduling. See HELP ALERT.

File 156:ToxFile 1965-2002/Sep W1

(c) format only 2002 The Dialog Corporation

File 342:Derwent Patents Citation Indx 1978-01/200210

(c) 2002 Thomson Derwent

*File 342: Updates 200160-200209 replaced. See HELP NEWS 342.

Alert feature enhanced for multiple files, etc. See HELP ALERT.

File 349:PCT FULLTEXT 1983-2002/UB=20020829,UT=20020815

(c) 2002 WIPO/Univentio

File 351:Derwent WPI 1963-2002/UD,UM &UP=200256

(c) 2002 Thomson Derwent

*File 351: Alerts can now have images sent via all delivery methods.

See HELP ALERT and HELP PRINT for more info.

File 352:Derwent WPI 1963-2002/UD,UM &UP=200256

(c) 2002 Thomson Derwent

*File 352: Alerts can now have images sent via all delivery methods.

See HELP ALERT and HELP PRINT for more info.

File 357:Derwent Biotech Res. 1982-2002/June W1

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*File 357: File enhancements now online. See HELP NEWS 357.

Alert feature enhanced for multiple files, etc. See HELP ALERT.

File 399:CA SEARCH(R) 1967-2002/UD=13710

(c) 2002 American Chemical Society

*File 399: Use is subject to the terms of your user/customer agreement.

Alert feature enhanced for multiple files, etc. See HELP ALERT.

File 440:Current Contents Search(R) 1990-2002/Sep 04

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File 484:Periodical Abs Plustext 1986-2002/Aug W4

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ENTER 'HELP PROQUEST' FOR MORE

Set Items Description

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?exs

Executing TD156

>>>SET HILIGHT: use ON, OFF, or 1-5 characters

77294 MELATONIN

6592114 RELATED

3672177 RECEPTOR

S1 68 MELATONIN (W) RELATED (W) RECEPTOR

?rd

>>>Duplicate detection is not supported for File 342.

>>>Duplicate detection is not supported for File 349.

>>>Duplicate detection is not supported for File 351.

>>>Duplicate detection is not supported for File 352.

>>>Records from unsupported files will be retained in the RD set.
...examined 50 records (50)
>>>Record 440:14055006 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:14054482 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:14054399 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:14054285 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:14053963 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:12663758 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:10275331 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:9820687 ignored; incomplete bibliographic data, not retained
in RD set
>>>Record 440:7413162 ignored; incomplete bibliographic data, not retained
in RD set
...completed examining records
S2 22 RD (unique items)
?t s2/medium,k/all
>>>KWIC option is not available in file(s): 399

2/K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

13054517 BIOSIS NO.: 200100261666
Localization of the melatonin - related receptor in the rodent brain
and peripheral tissues.
AUTHOR: Drew J E(a); Barrett P; Mercer J G; Moar K M; Canet E; Delagrange P
; Morgan P J
AUTHOR ADDRESS: (a)Molecular Neuroendocrinology Group, Rowett Research
Institute, Bucksburn, Aberdeen, AB21 9SB: jed@rri.sari.ac.uk**UK
JOURNAL: Journal of Neuroendocrinology 13 (5):p453-458 May, 2001
MEDIUM: print
ISSN: 0953-8194
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

Localization of the melatonin - related receptor in the rodent brain

and peripheral tissues.

ABSTRACT: Previous studies have provided a limited examination of the expression of the orphan melatonin - related receptor in the pituitary and hypothalamus of human and sheep and retinal tissue in the sheep...

...paraventricular thalamic nucleus of the mouse, rat and hamster. An extensive and detailed analysis of melatonin - related receptor mRNA expression in the mouse central nervous system and peripheral tissues is presented. Mapping the...

...polymerase chain reaction was performed with RNA isolated from peripheral tissues revealing expression of the melatonin - related receptor mRNA in the mouse kidney, adrenal gland, intestine, stomach, heart, lung, skin, testis and ovary...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: melatonin - related receptor ; ...

... melatonin - related receptor messenger RNA

2/K/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

12649542 BIOSIS NO.: 200000403044

Chimeric melatonin mt1 and melatonin-related receptors: Identification of domains and residues participating in ligand binding and receptor activation of the melatonin mt1 receptor.

AUTHOR: Conway Shaun(a); Drew Janice E; Mowat Elaine S; Barrett Perry; Delagrang Philippe; Morgan Peter J

AUTHOR ADDRESS: (a)Molecular Neuroendocrinology Group, Div. of Appetite and Energy Balance, Rowett Research Inst., Greenburn Rd., Bucksburn, Aberdeen, AB21 9SB**UK

JOURNAL: Journal of Biological Chemistry 275 (27):p20602-20609 July 7, 2000

MEDIUM: print

ISSN: 0021-9258

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: Melatonin receptors bind and become activated by melatonin. The melatonin - related receptor , despite sharing considerable amino acid

sequence identity with melatonin receptors, does not bind melatonin and

...

...or 7 of the melatonin mt1 receptor were replaced by the corresponding domains of the melatonin - related receptor , the resultant chimeric receptors all displayed specific 2-(125I)iodomelatonin binding. Replacement of sequences incorporating...

...a "reverse" chimeric receptor in which sequences encoding transmembrane domains 4 and 6 of the melatonin - related receptor were replaced by the corresponding melatonin mt1 receptor sequences identified specific 2-(125I)iodomelatonin binding...

2/K/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

12214801 BIOSIS NO.: 199900509650
Genetic and transcription analysis in Rett syndrome.
AUTHOR: Manzati E(a); Bigoni S(a); Gualandi F(a); Scapoli C; Guarna M; Pini G; Zappella M; Muntoni F; Hajek G; Calzolari E(a); Ferlini A(a)
AUTHOR ADDRESS: (a)Istituto di Genetica Medica, Universita' di Ferrara, Ferrara**Italy
JOURNAL: American Journal of Human Genetics 65 (4):pA478 Oct., 1999
CONFERENCE/MEETING: 49th Annual Meeting of the American Society of Human Genetics San Francisco, California, USA October 19-23, 1999
SPONSOR: The American Society of Human Genetics
ISSN: 0002-9297
RECORD TYPE: Citation
LANGUAGE: English

DESCRIPTORS:
CHEMICALS & BIOCHEMICALS: ...human melatonin - related receptor gene (Hominidae...

2/K/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

11899542 BIOSIS NO.: 199900145651
Short communication: Assignment of the melatonin - related receptor to human chromosome X (GPR50) and mouse chromosome X (Gpr50).
AUTHOR: Gubitzi Amelie K; Reppert Steven M(a)
AUTHOR ADDRESS: (a)Jackson 1226, Massachusetts General Hospital, Boston, MA

02114**USA
JOURNAL: Genomics 55 (2):p248-251 Jan. 15, 1999
ISSN: 0888-7543
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Short communication: Assignment of the melatonin - related receptor to human chromosome X (GPR50) and mouse chromosome X (Gpr50).

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... melatonin - related receptor ; ...

... melatonin - related receptor gene...

... melatonin - related receptor

2/K/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

11664800 BIOSIS NO.: 199800446531

The ovine melatonin - related receptor : Cloning and preliminary distribution and binding studies.

AUTHOR: Drew Janice E(a); Barrett Perry; Williams Lynda M; Conway Shaun; Morgan Peter J

AUTHOR ADDRESS: (a)Neuroendocrinology, Rowett Res. Inst., Greenburn Road, Bucksburn, Aberdeen AB21 9SB**UK

JOURNAL: Journal of Neuroendocrinology 10 (9):p651-661 Sept., 1998

ISSN: 0953-8194

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

The ovine melatonin - related receptor : Cloning and preliminary distribution and binding studies.

ABSTRACT: A melatonin - related receptor was cloned from an ovine genomic library. The sequenced gene has. a similar structure to...

...by an intron of approximately 3 kb. Exon 1 and exon 2 of the ovine melatonin - related receptor encode a protein of 575 amino acids which is 73.8% homologous to the human melatonin - related receptor and shows 40.9% homology with the ovine Mel1a melatonin receptor. COS-7 cells transiently...

...polymerase chain reaction (RT-PCR) and in situ hybridization studies revealed expression of the ovine melatonin - related receptor in the hypothalamus, pituitary, retina and retinal pigment epithelium. Furthermore, expression of the ovine melatonin - related receptor is shown to be coincident with Mel1a and 2-(125I)iodomelatonin binding in the pituitary...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ...ovine melatonin - related receptor --

2/K/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

10948065 BIOSIS NO.: 199799569210
The Mel-1a melatonin receptor gene is expressed in human suprachiasmatic nuclei.
AUTHOR: Weaver David R(a); Reppert Steven M
AUTHOR ADDRESS: (a)Lab. Developmental Chronobiol., Pediatric Service, Massachusetts Gen. Hosp., Boston, MA 02114**USA
JOURNAL: Neuroreport 8 (1):p109-112
ISSN: 0959-4965
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: receptor mRNA is detectable in neonatal human SCN by in situ hybridization. Mel-1b and melatonin - related receptor mRNAs were not detected. The presence of Mel-1a receptor mRNA in human SCN supports...

2/K/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

10383220 BIOSIS NO.: 199699004365
Cloning of a melatonin - related receptor from human pituitary.
AUTHOR: Reppert Steven M(a); Weaver David R; Ebisawa Takashi; Mahle Cathy D ; Kolakowski Lee F Jr
AUTHOR ADDRESS: (a)Lab. Dev. Chronobiol., Massaschusetts General Hosp., Jackson 1226, Boston, MA 02114**USA
JOURNAL: FEBS Letters 386 (2-3):p219-224 1996
ISSN: 0014-5793
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

Cloning of a melatonin - related receptor from human pituitary.

2/K/8 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2002 Inst for Sci Info. All rts. reserv.

07430847 Genuine Article#: 164WY No. References: 9
Title: Assignment of the melatonin - related receptor to human
chromosome X (GPR50) and mouse chromosome X (Gpr50)
Author(s): Gubitza AK; Reppert SM (REPRINT)
Corporate Source: MASSACHUSETTS GEN HOSP,SERV PEDIAT, LAB DEV
CHRONOBIOL/BOSTON//MA/02114 (REPRINT); MASSACHUSETTS GEN
HOSP,SERV
PEDIAT, LAB DEV CHRONOBIOL/BOSTON//MA/02114; HARVARD UNIV,SCH
MED/BOSTON//MA/02114
Journal: GENOMICS, 1999, V55, N2 (JAN 15), P248-251
ISSN: 0888-7543 Publication date: 19990115
Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-
4495
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Assignment of the melatonin - related receptor to human
chromosome X (GPR50) and mouse chromosome X (Gpr50)

2/K/9 (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences
(c) 2002 BLDSC all rts. reserv. All rts. reserv.

03887072 INSIDE CONFERENCE ITEM ID: CN040853091
Expression of MT1 and Melatonin Related Receptor (H9) in Adult Rat
Testis
De Rienzo, G.; Aniello, F.; Ferrara, D.; Minucci, S.; Serino, I. ; D
istria, M.
CONFERENCE: International congress of Comparative Endocrinology;
Perspective in comparative endocrinology-14th
P: 1075-1080
Monduzzi Editore, 2001
ISBN: 8832315262
LANGUAGE: English DOCUMENT TYPE: Conference Papers
CONFERENCE EDITOR(S): Goos, H. J. T.
CONFERENCE SPONSOR: International Federation of Comparative
Endocrinology Societies
CONFERENCE LOCATION: Sorrento, Italy 2001; May (200105) (200105)

Expression of MT1 and Melatonin Related Receptor (H9) in Adult Rat Testis

2/K/10 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE
(c) 2002 Elsevier Science B.V. All rts. reserv.

01490276 2000162681

Chimeric melatonin and melatonin-related receptors: Identification of domains and residues participating in ligand binding and receptor activation of the melatonin mtinf 1 receptor

Conway S.; Drew J.E.; Mowat E.S.; Barrett P.; Delagrang P.; Morgan P.J.

ADDRESS: S. Conway, Molecular Neuroendocrinology Group, Div. of Appetite and Energy Balance, Rowett Research Inst., Greenburn Rd., Bucksburn, Aberdeen AB21 9SB, United Kingdom

EMAIL: sco@rri.sari.ac.uk

Journal: Journal of Biological Chemistry, 275/27 (20602-20609), 2000, United States

PUBLICATION DATE: July 7, 2000

CODEN: JBCHA

ISSN: 0021-9258

DOCUMENT TYPE: Article

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 36

CLASSIFICATION CODE AND DESCRIPTION:

99 - General

Melatonin receptors bind and become activated by melatonin. The melatonin - related receptor , despite sharing considerable amino acid sequence identity with melatonin receptors, does not bind melatonin and...

...7 of the melatonin mtinf 1 receptor were replaced by the corresponding domains of the melatonin - related receptor , the resultant chimeric receptors all displayed specific 2-[sup 1sup 2sup 5I]iodomelatonin binding. Replacement...

...a 'reverse' chimeric receptor in which sequences encoding transmembrane domains 4 and 6 of the melatonin - related receptor were replaced by the corresponding melatonin mtinf 1 receptor sequences identified specific 2-[sup 1sup...

2/K/11 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2002 INIST/CNRS. All rts. reserv.

13979688 PASCAL No.: 99-0162912
Assignment of the melatonin - related receptor to human chromosome X
(GPRSO) and mouse chromosome X (Gpr50)
GUBITZ A K; REPPERT S M
Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital and Harvard Medical School, Boston,
Massachusetts 02114, United States
Journal: Genomics : (San Diego, CA), 1999, 55 (2) 248-251
Language: English

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Assignment of the melatonin - related receptor to human chromosome X
(GPRSO) and mouse chromosome X (Gpr50)

2/K/12 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2002 INIST/CNRS. All rts. reserv.

12884464 PASCAL No.: 97-0147497
The Mel SUB 1 SUB a melatonin receptor gene is expressed in human
suprachiasmatic nuclei
WEAVER D R; REPPERT S M
Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital, Boston, MA 02114, United States; Department
of Pediatrics and Program in Neuroscience, Harvard Medical School, Boston,
MA 02115, United States
Journal: Neuroreport : (Oxford), 1996, 8 (1) 109-112
Language: English

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... detectable in neonatal human SCN by in situ hybridization. Mel SUB 1
SUB b and melatonin - related receptor mRNAs were not detected. The
presence of Mel SUB 1 SUB a receptor mRNA in...

2/K/13 (Item 1 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx
(c) 2002 Thomson Derwent. All rts. reserv.

04467085 WPI Acc No: 01-182979/18
Diagnosing a bone-related disorder, such as osteoporosis or Paget's
disease, comprises detecting a melatonin-related receptor (MRR) protein, a

MRR polynucleotide, or a MMR-binding agent -

Patent Assignee: (MILL-) MILLENNIUM PHARM INC

Author (Inventor): WHITE D

Patent (basic)

Patent No Kind Date Examiner Field of Search

WO 200109383 A2 010208 (BASIC)

Derwent Week (Basic): 0118

Priority Data: US 146614P (990730)

Applications: AU 200063852 (000728); WO 2000US20524 (000728)

Designated States

(National): AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH;
CN; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU
; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV;
MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI
; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW
(Regional): AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE;
IT; KE; LS; LU; MC; MW; MZ; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW

Derwent Class: B04; D16

Int Pat Class: C12Q-001/68

Number of Patents: 002

Number of Countries: 093

Number of Cited Patents: 000

Number of Cited Literature References: 000

Number of Citing Patents: 000

2/K/14 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00888011

METHODS AND COMPOSITIONS FOR IN VITRO TARGETING

PROCEDES ET COMPOSITIONS UTILISES POUR LE CIBLAGE IN VITRO

Patent Applicant/Assignee:

BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTE, 201 West 7th Street,
Austin, TX 78701, US, US (Residence), US (Nationality), (For all
designated states except: US)

Patent Applicant/Inventor:

ARAP Wadih, 7171 Buffalo Speedway #328, Houston, TX 77025, US, US
(Residence), BR (Nationality), (Designated only for: US)

PASQUALINI Renata, 7171 Buffalo Speedway #328, Houston, tX 77025, US, US
(Residence), BR (Nationality), (Designated only for: US)

Legal Representative:

MALLIE Michael J (et al) (agent), Blakely, Sokoloff, Taylor & Zafman LLP,
7th Floor, 12400 Wilshire Blvd., Los Angeles, CA 90025, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200220722 A2 20020314 (WO 0220722)
Application: WO 2001US27702 20010907 (PCT/WO US0127702)
Priority Application: US 2000231266 20000908; US 2001765101 20010117
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO
CR CU
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL
PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: C12N
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 49001

English Abstract

The present invention concerns methods and compositions for in vivo and in vitro targeting. A large number of targeting peptides directed towards human organs, tissues or cell types are disclosed. The peptides are of use for targeted delivery of therapeutic agents, including but not limited to gene therapy vectors. A novel class of gene therapy vectors is disclosed. Certain of the disclosed peptides have therapeutic use for inhibiting angiogenesis, inhibiting tumor growth, inducing apoptosis, inhibiting pregnancy or inducing weight loss. Methods of identifying novel targeting peptides in humans, as well as identifying endogenous receptor-ligand pairs are disclosed. Methods of identifying novel infectious agents that are causal for human disease states are also disclosed. A novel mechanism for inducing apoptosis is further disclosed.

French Abstract

La presente invention concerne des procedes et des compositions utilisees pour le ciblage *in vivo* et *in vitro* ; ainsi qu'un grand nombre de peptides de ciblage diriges sur des organes, des tissus ou des types de cellules humains. Les peptides sont utilises pour apporter de maniere ciblee des agents therapeutiques, y compris pour apporter des vecteurs de therapie genique entre autres. Une nouvelle classe de vecteurs de therapie genique est presentee. Certains peptides parmi les peptides presentes sont utiles en therapie pour inhiber l'angiogenese, inhiber la croissance tumorale, induire l'apoptose, inhiber la gestation

ou induire une perte de poids. Des procedes permettant d'identifier de nouveaux peptides de ciblage chez l'homme et permettant d'identifier egalement des paires recepteur-ligand endogenes sont presentes, de meme que des procedes d'identification de nouveaux agents infectieux qui sont la cause d'etats pathologiques chez l'homme, et qu'un nouveau mecanisme permettant d'induire l'apoptose.

Legal Status (Type, Date, Text)

Publication 20020314 A2 Without international search report and to be republished upon receipt of that report.

Fulltext Availability:

Detailed Description

Detailed Description

... 232

Down Syndrome Cell Adhesion 83% (5/6 AA) 1438-1443

80

Molecule Precursor

CRVLADRDC Melatonin - related receptor (H9) 100% (6/6 AA) 89-94

(SEQ ID NO: 15 1)

CRWSSMIWC Hepatocyte growth...

2/K/15 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00824983

HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF

GENE EXPRESSION IN HUMAN HEART

SONDES D'ACIDE NUCLEIQUE A UN SEUL EXON DERIVEES DU GENOME HUMAIN UTILES

POUR ANALYSER L'EXPRESSION GENIQUE DANS LE COEUR HUMAIN

Patent Applicant/Assignee:

AEOMICA INC, 928 East Arques Avenue, Sunnyvale, CA 94086, US, US

(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

PENN Sharron G, 617 South Delaware Street, San Mateo, CA 94402, US, US

(Residence), GB (Nationality), (Designated only for: US)

HANZEL David K, 968 Loma Verde Avenue, Palo Alto, CA 94303, US, US

(Residence), US (Nationality), (Designated only for: US)

CHEN Wensheng, 210 Easy Street #25, Mountain View, CA 94043, US, US

(Residence), CN (Nationality), (Designated only for: US)

RANK David R, 117 El Dorado Commons, Fremont, CA 94539, US, US

(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

RONNING Royal N Jr (agent), Amersham Pharmacia Biotech, Inc., 800
Centennial Avenue, P.O. Box 1327, Piscataway, NJ 08855, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200157274 A2 20010809 (WO 0157274)

Application: WO 2001US666 20010130 (PCT/WO US0100666)

Priority Application: US 2000180312 20000204; US 2000207456 20000526; US
2000608408 20000630; US 2000632366 20000803; US 2000234687 20000921; US
2000236359 20000927; GB 200024263 20001004

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR
CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: C12Q-001/68

International Patent Class: G06G-019/00; C07K-014/47

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 255847

English Abstract

A single exon nucleic acid microarray comprising a plurality of single
exon nucleic acid probes for measuring gene expression in a sample
derived from human heart is described. Also described are single exon
nucleic acid probes expressed in the heart and their use in methods for
detecting gene expression.

French Abstract

Puce a acide nucleique (microarray) a un seul exon comportant une
pluralite de sondes d'acide nucleique a un seul exon destinees a mesurer
l'expression genique dans un echantillon derive de coeur humain. La
presente invention concerne egalement des sondes d'acide nucleique a un
seul exon exprimees dans le coeur et leur utilisation dans des methodes
de detection de l'expression genique.

Legal Status (Type, Date, Text)

Publication 20010809 A2 Without international search report and to be

republished upon receipt of that report.
Examination 20011115 Request for preliminary examination prior to end of
19th month from priority date
Correction 20011220 Corrections of entry in Section 1: under
"Published", add "sequence listing part of
description published separately in electronic form
and available upon request from the International
Bureau."
Republication 20011220 A2 Without international search report and to be
republished upon receipt of that report.
Republication 20011220 A2 Sequence listing published separately in
electronic form and available upon request from the
International Bureau.

2/K/16 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00776955
COMPOSITIONS, KITS, AND METHODS FOR PROGNOSTICATION, DIAGNOSIS,
PREVENTION,

AND TREATMENT OF BONE-RELATED DISORDERS AND OTHER
DISORDERS
COMPOSITIONS, KITS, ET METHODES DE PREVISION, DE DIAGNOSTIC, DE
PREVENTION,

ET DE TRAITEMENT DE MALADIES DES OS ET D'AUTRES MALADIES

Patent Applicant/Assignee:

MILLENNIUM PHARMACEUTICALS INC, 75 Sidney Street, Cambridge, MA
02139, US

, US (Residence), US (Nationality)

Inventor(s):

WHITE David, 35 Hollingsworth Avenue, Braintree, MA 02148, US,

Legal Representative:

COLBY Gary D (et al) (agent), Akin, Gump, Strauss, Hauer & Feld, L.L.P.,
One Commerce Square, 2005 Market Street, Suite 2200, Philadelphia, PA
19103-7086, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200109383 A2-A3 20010208 (WO 0109383)

Application: WO 2000US20524 20000728 (PCT/WO US0020524)

Priority Application: US 99146614 19990730

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR
CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: C12Q-001/68

International Patent Class: A61K-048/00; A61K-038/17; G01N-033/53

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 34330

English Abstract

The invention relates to compositions, kits, and methods for predicting, detecting, inhibiting, and alleviating bone-related disorders and other disorders. Examples of bone-related disorders include osteoporosis, Paget's disease, hyperthyroidism, hyperparathyroidism, osteomalacia, chronic renal failure, Cushing's syndrome, osteogenic cancers, and non-osteogenic cancers that have metastasized to bone tissue.

French Abstract

L'invention concerne des compositions, des kits et des methodes permettant de prévoir, de detecter, d'inhiber et d'attenuer des maladies des os, ainsi que d'autres maladies. Parmi les maladies des os figurent l'osteoporose, la maladie de Paget, l'hyperthyroidie, hyperparathyroidie, l'osteomalacie, l'insuffisance renale chronique, le syndrome de Cushing, les cancers osteogeniques, et les cancers non-osteogeniques metastases dans les tissus osseux.

Legal Status (Type, Date, Text)

Publication 20010208 A2 Without international search report and to be republished upon receipt of that report.

Examination 20010726 Request for preliminary examination prior to end of 19th month from priority date

Search Rpt 20020711 Late publication of international search report

Republication 20020711 A3 With international search report.

Fulltext Availability:

Detailed Description

Detailed Description

... 1993, Hum.

Mol. Genet. 2:1201-1204).

Orthologs of a GPCR of unknown function (designated 'melatonin - related receptor' or 'MRR') have been identified in humans, rats, and mice (GenBank Accession Nos.

U52219, U52218...The present invention is based on the discovery that a G-protein coupled receptor designated melatonin - related receptor (MRR), which is expressed in hypothalamus and pituitary tissues in humans and which is also...

2/K/17 (Item 1 from file: 351)
DIALOG(R)File 351:Derwent WPI
(c) 2002 Thomson Derwent. All rts. reserv.

013698755

WPI Acc No: 2001-182979/200118

XRAM Acc No: C01-054660

Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent

Patent Assignee: MILLENNIUM PHARM INC (MILL-N)

Inventor: WHITE D

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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WO 200109383	A2	20010208	WO 2000US20524	A	20000728	200118 B
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AU 200063852	A	20010219	AU 200063852	A	20000728	200129
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Priority Applications (No Type Date): US 99146614 P 19990730

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200109383	A2	E	107	C12Q-001/68	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN

IS JP

KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT

RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200063852 A C12Q-001/68 Based on patent WO 200109383

Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent

Abstract (Basic):

... Diagnosing (M1) a bone-related disorder (BRD) in a human comprising detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent, is new.

2/K/18 (Item 1 from file: 352)
DIALOG(R)File 352:Derwent WPI
(c) 2002 Thomson Derwent. All rts. reserv.

013698755

WPI Acc No: 2001-182979/200118

XRAM Acc No: C01-054660

Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent

Patent Assignee: MILLENNIUM PHARM INC (MILL-N)

Inventor: WHITE D

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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WO 200109383	A2	20010208	WO 2000US20524	A	20000728	200118 B
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AU 200063852	A	20010219	AU 200063852	A	20000728	200129
--------------	---	----------	--------------	---	----------	--------

Priority Applications (No Type Date): US 99146614 P 19990730

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200109383	A2	E	107	C12Q-001/68	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP

KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO
NZ PL PT

RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200063852 A C12Q-001/68 Based on patent WO 200109383

Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent

Abstract (Basic):

... Diagnosing (M1) a bone-related disorder (BRD) in a human comprising detecting a melatonin - related receptor (MRR) protein,

a MRR polynucleotide, or a MMR-binding agent, is new.

2/K/19 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
(c) 2002 Thomson Derwent & ISI. All rts. reserv.

0267511 DBA Accession No.: 2001-07265 PATENT
Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent - vector-mediated gene transfer, expression in host cell, antibody, agonist, antagonist, DNA probe, DNA primer, antisense oligonucleotide, antibody and transgenic animal for diagnosis and gene therapy
AUTHOR: White D
CORPORATE SOURCE: Cambridge, MA, USA.
PATENT ASSIGNEE: Millennium-Pharm. 2001
PATENT NUMBER: WO 200109383 PATENT DATE: 20010208 WPI ACCESSION NO.:
2001-182979 (2018)
PRIORITY APPLIC. NO.: US 146614 APPLIC. DATE: 19990730
NATIONAL APPLIC. NO.: WO 2000US20524 APPLIC. DATE: 20000728
LANGUAGE: English

Diagnosing a bone-related disorder, such as osteoporosis or Paget's disease, comprises detecting a melatonin - related receptor (MRR) protein, a MRR polynucleotide, or a MMR-binding agent
...ABSTRACT: M1) a bone-related disorder (BRD) in a human is new and involves detecting a melatonin - related receptor (MRR) protein, a MRR DNA, or a MMR-binding agent. Also claimed are: determining whether
...
DESCRIPTORS: vector-mediated melatonin - related receptor protein gene transfer, expression in host cell, antibody, agonist, antagonist, DNA probe, DNA primer, antisense...

2/K/20 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

134161450 CA: 134(12)161450x PATENT
MRR gene, cDNA, and protein, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders
INVENTOR(AUTHOR): White, David
LOCATION: USA
ASSIGNEE: Millennium Pharmaceuticals, Inc.

PATENT: PCT International ; WO 200109383 A2 DATE: 20010208
APPLICATION: WO 2000US20524 (20000728) *US PV146614 (19990730)
PAGES: 107 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY;
BZ;
CA; CH; CN; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR;
HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA;
MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK;
SL;
TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD;
RU;
TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW
; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE;
BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

2/K/21 (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
(c) 2002 ProQuest. All rts. reserv.

03516024 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Melatonin receptors: Molecular biology of a new family of G
protein-coupled receptors
Reppert, Steven M
Journal of Biological Rhythms (FJBR), v12 n6, p528-531, p.4
Dec 1997
ISSN: 0748-7304 JOURNAL CODE: FJBR
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1873

TEXT:

... related to the G protein-coupled melatonin receptor family (Fig.
2). Unusual features of this " melatonin - related receptor " include the
lack of N-linked glycosylation sites and a carboxyl tail more than 300...

...The orphan receptor does not bind sup 125 I-Mel or [sup 3 H]melatonin.
Melatonin - related receptor mRNA is expressed in hypothalamus and
pituitary, suggesting that the receptor and its natural ligand...

...SM, Weaver DR, Ebisawa T, Mahle CD, and Kolakowski LF Jr. (1996a)
Cloning of a melatonin - related receptor from human pituitary. FEBS
Lett 386:219-224. Reppert SM, Weaver DR, and Godson C...

2/K/22 (Item 2 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
(c) 2002 ProQuest. All rts. reserv.

03516020 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Time and time again: The phylogeny of melatonin as a transducer of
biological time

Cassone, Vincent M; Natesan, Arjun K

Journal of Biological Rhythms (FJBR), v12 n6, p489-497, p.9

Dec 1997

ISSN: 0748-7304 JOURNAL CODE: FJBR

DOCUMENT TYPE: Feature

LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4738

TEXT:

... al., 1994, 1995a, 1995b). Cladistic analysis of the aligned
sequences of published melatonin receptors and melatonin - related
receptor proteins (Reppert et al., 1996) using chicken pineal opsin (Okano
et al., 1994) as an...Reppert SM, Weaver DR, Ebisawa T, Mahle CD, and
Kolekowsky LF (1996) Cloning of a melatonin - related receptor from
human pituitary FEBS Lett 386:219-224. Reppert SM, Weaver DR, Rivkees SA,
and...
?

Set	Items	Description
S1	68061	MELATONIN
S2	12605	S1 AND RECEPTOR?
S3	1372	S2 AND RELATED
S4	41	MELATONIN (W) RELATED (W) RECEPTOR
S5	13	RD (unique items)
S6	22140	G (W) PROTEIN (W) COUPLED (W) RECEPTOR
S7	2996	S6 AND CALCIUM?
S8	123	S7 AND OSTEO?
S9	32	S7 AND OSTEOPOROSIS
S10	13	RD (unique items)

File 5:Biosis Previews(R) 1969-2002/Sep W1
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File 34:SciSearch(R) Cited Ref Sci 1990-2002/Sep W1
(c) 2002 Inst for Sci Info

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File 77:Conference Papers Index 1973-2002/Sep
(c) 2002 Cambridge Sci Abs

File 91:MANTIS(TM) 1880-2002/Oct
2001 (c) Action Potential

File 94:JICST-EPlus 1985-2002/Jul W1
(c)2002 Japan Science and Tech Corp(JST)

File 98:General Sci Abs/Full-Text 1984-2002/Jul
(c) 2002 The HW Wilson Co.

File 135:NewsRx Weekly Reports 1995-2002/Aug W4
(c) 2002 NewsRx

File 144:Pascal 1973-2002/Sep W1
(c) 2002 INIST/CNRS

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File 164:Allied & Complementary Medicine 1984-2002/Aug

(c) 2002 BLHCIS

File 172:EMBASE Alert 2002/Sep W1

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File 266:FEDRIP 2002/Jul

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File 370:Science 1996-1999/Jul W3

(c) 1999 AAAS

File 399:CA SEARCH(R) 1967-2002/UD=13710

(c) 2002 American Chemical Society

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 1998 Inst for Sci Info

File 442:AMA Journals 1982-2002/Aug B1

(c)2002 Amer Med Assn -FARS/DARS apply

File 444:New England Journal of Med. 1985-2002/Sep W1

(c) 2002 Mass. Med. Soc.

File 467:ExtraMED(tm) 2000/Dec

(c) 2001 Informania Ltd.

T/FULL/ALL

10/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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13842372 BIOSIS NO.: 200200471193

Clinical disorders of extracellular calcium-sensing and the molecular biology of the calcium-sensing receptor.

AUTHOR: Pearce Simon H S(a)

AUTHOR ADDRESS: (a)Institute of Human Genetics, International Centre for Life, Central Parkway, Newcastle upon Tyne, NE1 3BZ**UK E-Mail: spearce@hgmp.mrc.ac.uk

JOURNAL: Annals of Medicine 34 (3):p201-206 2002

MEDIUM: print

ISSN: 0785-3890

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The calcium-sensing receptor is a G protein-coupled receptor that has a key role in extracellular calcium homeostasis, regulating the secretion of parathyroid hormone and the reabsorption of urinary calcium appropriate to the prevailing calcaemic environment. Molecular abnormalities of the calcium-sensing receptor are responsible for three clinical disorders, familial benign hypocalciuric hypercalcaemia, neonatal severe hyperparathyroidism and autosomal dominant hypocalcaemia with hypercalciuria. In the future, therapeutic compounds that modulate calcium-sensing receptor function may have a role in the medical management of hyperparathyroidism (calcimimetic drugs) and osteoporosis (calcilytic drugs).

REGISTRY NUMBERS: 9002-64-6: PARATHYROID HORMONE

DESCRIPTORS:

10/9/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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13088150 BIOSIS NO.: 200100295299

Extracellular calcium-sensing receptor: Structural and functional features
and association with diseases.

AUTHOR: Hauache O M(a)

AUTHOR ADDRESS: (a)Disciplina de Endocrinologia, EPM, UNIFESP, Rua Pedro de
Toledo, 781, 12th andar, 04039-032, Sao Paulo, SP:

ohauache-endo@pesquisa.epm.br**Brazil

JOURNAL: Brazilian Journal of Medical and Biological Research 34 (5):p
577-584 May, 2001

MEDIUM: print

ISSN: 0100-879X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: The recently cloned extracellular calcium-sensing receptor (CaR)
is a G protein-coupled receptor that plays an essential role in the
regulation of extracellular calcium homeostasis. This receptor is
expressed in all tissues related to this control (parathyroid glands,
thyroid C-cells, kidneys, intestine and bones) and also in tissues with
apparently no role in the maintenance of extracellular calcium levels,
such as brain, skin and pancreas. The CaR amino acid sequence is
compatible with three major domains: a long and hydrophilic aminoterminal
extracellular domain, where most of the activating and inactivating
mutations described to date are located and where the dimerization
process occurs, and the agonist-binding site is located, a hydrophobic
transmembrane domain involved in the signal transduction mechanism from
the extracellular domain to its respective G protein, and a
carboxyterminal intracellular tail, with a well-established role for cell
surface CaR expression and for signal transduction. CaR cloning was
immediately followed by the association of genetic human diseases with
inactivating and activating CaR mutations: familial hypocalciuric
hypercalcemia and neonatal severe hyperparathyroidism are caused by

CaR-inactivating mutations, whereas autosomal dominant hypoparathyroidism is secondary to CaR-activating mutations. Finally, we will comment on the development of drugs that modulate CaR function by either activating (calcimimetic drugs) or antagonizing it (calcilytic drugs), and on their potential therapeutic implications, such as medical control of specific cases of primary and uremic hyperparathyroidism with calcimimetic drugs and a potential treatment for osteoporosis with a calcilytic drug.

REGISTRY NUMBERS: 7440-70-2: CALCIUM

10/9/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

12291531 BIOSIS NO.: 200000049398

Receptors for PTH and PTHrP: Their biological importance and functional properties.

AUTHOR: Mannstadt Michael; Juppner Harald(a); Gardella Thomas J

AUTHOR ADDRESS: (a)Endocrine Unit, Department of Medicine and Pediatrics,
Massachusetts General Hospital and Harvard Medical School, Boston, MA**
USA

JOURNAL: American Journal of Physiology 277 (5 PART 2):pF665-F675 Nov.,
1999

ISSN: 0002-9513

DOCUMENT TYPE: Literature Review

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: The type 1 receptor (PTH1R) for parathyroid hormone (PTH) and parathyroid hormone-related peptide (PTHrP) is a G protein-coupled receptor that is highly expressed in bone and kidney and mediates in these tissues the PTH-dependent regulation of mineral ion homeostasis. The PTH1R also mediates the paracrine actions of PTHrP, which play a particularly vital role in the process of endochondral bone formation. These important functions, the likely involvement of the PTH1R in certain genetic diseases affecting skeletal development and calcium homeostasis,

and the potential utility of PTH in treating osteoporosis have been the driving force behind intense investigations of both the receptor and its peptide ligands. Recent lines of work have led to the identification of constitutively active PTH1Rs in patients with Jansen's metaphyseal chondrodysplasia, the demonstration of inverse agonism by certain ligand analogs, and the discovery of the PTH-2 receptor subtype that responds to PTH but not PTHrP. As reviewed herein, a detailed exploration of the receptor-ligand interaction process is currently being pursued through the use of site-directed mutagenesis and photoaffinity cross-linking methods; ultimately, such work could enable the development of novel PTH receptor ligands that have therapeutic value in treating diseases such as osteoporosis and certain forms of hypercalcemia.

REGISTRY NUMBERS: 9002-64-6: PARATHYROID HORMONE

10/9/4 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2002 Inst for Sci Info. All rts. reserv.

10385531 Genuine Article#: 521GA Number of References: 248

Title: Parathyroid hormone-dependent signaling pathways regulating genes in bone cells

Author(s): Swarthout JT; D'Alonzo RC; Selvamurugan N; Partridge NC
(REPRINT)

Corporate Source: Univ Med & Dent New Jersey,Robert Wood Johnson Med Sch,
Dept Physiol & Biophys,675 Hoes Lane/Piscataway//NJ/08854 (REPRINT);
Univ Med & Dent New Jersey,Robert Wood Johnson Med Sch, Dept Physiol &
Biophys,Piscataway//NJ/08854; St Louis Univ,Sch Med, Cell & Mol Biol
Program,St Louis//MO/63104; St Louis Univ,Sch Med, Dept Pharmacol &
Physiol Sci,St Louis//MO/63104

Journal: GENE, 2002, V282, N1-2 (JAN 9), P1-17

ISSN: 0378-1119 Publication date: 20020109

Publisher: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Language: English Document Type: REVIEW

Geographic Location: USA

Journal Subject Category: GENETICS & HEREDITY

Abstract: Parathyroid hormone (PTH) is an 84-amino-acid polypeptide hormone

functioning as a major mediator of bone remodeling and as an essential regulator of calcium homeostasis. PTH and PTH-related protein (PTHrP) indirectly activate osteoclasts resulting in increased bone resorption. During this process, PTH changes the phenotype of the osteoblast from a cell involved in bone formation to one directing bone resorption. In addition to these catabolic effects, PTH has been demonstrated to be an anabolic factor in skeletal tissue and in vitro. As a result, PTH has potential medical application to the treatment of osteoporosis, since intermittent administration of PTH stimulates bone formation. Activation of osteoblasts by PTH results in expression of genes important for the degradation of the extracellular matrix, production of growth factors, and stimulation and recruitment of osteoclasts. The ability of PTH to drive changes in gene expression is dependent upon activation of transcription factors such as the activator protein-1 family, RUNX2, and cAMP response element binding protein (CREB). Much of the regulation of these processes by PTH is protein kinase A (PKA)-dependent. However, while PKA is linked to many of the changes in gene expression directed by PTH, PKA activation has been shown to inhibit mitogen-activated protein kinase (MAPK) and proliferation of osteoblasts. It is now known that stimulation of MAPK and proliferation by PTH at low concentrations is protein kinase C (PKC)-dependent in both osteoblastic and kidney cells. Furthermore, PTH has been demonstrated to regulate components of the cell cycle. However, whether this regulation requires PKC and/or extracellular signal-regulated kinases or whether PTH is able to stimulate other components of the cell cycle is unknown. It is possible that stimulation of this signaling pathway by PTH mediates a unique pattern of gene expression resulting in proliferation in osteoblastic and kidney cells; however, specific examples of this are still unknown. This review will focus on what is known about PTH-mediated cell signaling, and discuss the established or putative PTH-regulated pattern of gene expression in osteoblastic cells following treatment with catabolic (high) or anabolic (low) concentrations of the hormone. (C) 2002 Elsevier Science B.V. All rights reserved.

Descriptors--Author Keywords: osteoblast ; protein kinase A ; protein kinase C ; gene expression ; G protein coupled receptor ; G protein

Identifiers--KeyWord Plus(R): ACTIVATED PROTEIN-KINASE; OSTEObLAST-LIKE

CELLS; GROWTH-FACTOR-I; OSTEOGENIC-SARCOMA CELLS; C-FOS PROMOTER;
OSTEOCLAST DIFFERENTIATION FACTOR; INHIBITS COLLAGEN-SYNTHESIS;
GLYCOGEN-SYNTHASE KINASE-3; MESSENGER-RIBONUCLEIC-ACID;
COLONY-STIMULATING FACTOR

10/9/5 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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06762190 Genuine Article#: ZP870 Number of References: 16

Title: Expression of extracellular calcium (Ca-o(2+))-sensing receptor in
human peripheral blood monocytes

Author(s): Yamaguchi T (REPRINT) ; Olozak I; Chattopadhyay N; Butters RR;
Kifor O; Scadden DT; Brown EM

Corporate Source: BRIGHAM & WOMENS HOSP,DEPT MED, DIV ENDOCRINE HYPERTENS,
75 FRANCIS ST/BOSTON//MA/02115 (REPRINT); HARVARD UNIV,SCH
MED/BOSTON//MA/02115; MASSACHUSETTS GEN HOSP,/BOSTON//MA/02115

Journal: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, 1998, V246,
N2 (MAY 19), P501-506

ISSN: 0006-291X Publication date: 19980519

Publisher: ACADEMIC PRESS INC JNL-COMP SUBSCRIPTIONS, 525 B ST, STE 1900,
SAN DIEGO, CA 92101-4495

Language: English Document Type: ARTICLE

Geographic Location: USA

Subfile: CC LIFE--Current Contents, Life Sciences

Journal Subject Category: BIOCHEMISTRY & MOLECULAR BIOLOGY; BIOPHYSICS

Abstract: The calcium-sensing receptor (CaR) is a G protein-coupled
receptor playing key roles in extracellular calcium ion (Ca-o(2+))
homeostasis in parathyroid gland and kidney. Macrophage-like
mononuclear cells appear at sites of osteoclastic bone resorption
during bone turnover and may play a role in the "reversal" phase of
skeletal remodelling that follows osteoclastic resorption and precedes
osteoblastic bone formation. Bone resorption produces substantial local
increases in Ca-o(2+) that could provide a signal for such mononuclear
cells present locally within the bone marrow microenvironment. Indeed,
previous studies by other investigators have shown that raising

Ca-o(2+) either in vivo or in vitro stimulated the release of interleukin-6 (IL-6) from human peripheral blood monocytes, suggesting that these cells express a Ca-o(2+)-sensing mechanism. In these earlier studies, however, the use of reverse transcription-polymerase chain reaction (RT-PCR) failed to detect transcripts for the CaR previously cloned from parathyroid and kidney in peripheral blood monocytes. Since we recently found that non specific esterase-positive, putative monocytes isolated from murine bone marrow express the CaR, we reevaluated the expression of this receptor in human peripheral blood monocytes. Immunocytochemistry, flow cytometry, and Western blot analysis, performed using a polyclonal antiserum specific for the CaR, detected CaR protein in human monocytes. In addition, the use of RT-PCR with CaR-specific primers, followed by nucleotide sequencing of the amplified products, identified CaR transcripts in the cells. Therefore, taken together, our data show that human peripheral blood monocytes possess both CaR protein and mRNA very similar if not identical to those expressed in parathyroid and kidney that could mediate the previously described, direct effects of Ca-o(2+) on these cells. Furthermore, since mononuclear cells isolated from bone marrow also express the CaR, the latter might play some role in the "reversal" phase of bone remodelling, sensing local changes in Ca-o(2+) resulting from osteoclastic bone resorption and secreting osteotropic cytokines or performing other Ca-o(2+)-regulated functions that contribute to the control of bone turnover. (C) 1998 Academic Press.

Identifiers--KeyWord Plus(R): OSTEOLASTIC MC3T3-E1 CELLS; INTERLEUKIN-1; PROLIFERATION; OSTEOPOROSIS; RELEASE

10/9/6 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

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11594211 EMBASE No: 2002165713

NPS-2143: Treatment of osteoporosis calcilytic

Doggrell S.A.; Del Fresno M.; Castan(tilde)er J.

S.A. Doggrell, Department of Pharmacology, School of Biomedical Sciences,
University of Queensland, Brisbane, QLD 4072 Australia

Drugs of the Future (DRUGS FUTURE) (Spain) 2002, 27/2 (140-142)

CODEN: DRFUD ISSN: 0377-8282

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 7

Efforts to discover new treatments for osteoporosis led to the identification of the potent and selective, small-molecule calcium receptor antagonist NPS-2143. NPS-2143 is the prototype calcilytic drug, designed to act on calcium receptors on the surface of parathyroid glands, stimulating the release of the body's own stores of native parathyroid hormone (PTH). In osteopenic ovariectomized rats, daily oral administration of NPS-2143 resulted in moderate but sustained increases in plasma PTH levels and marked increases in bone formation and resorption, with no net bone gain or loss. The combination of NPS-2143 and estrogen increases bone formation and density to a greater extent than either agent alone. These results suggest that NPS-2143 may be useful in the treatment of established osteoporosis.

BRAND NAME/MANUFACTURER NAME: nps 2143/NPS Pharmaceuticals/United States;
sb 262470/Glaxo SmithKline/United Kingdom

MANUFACTURER NAMES: NPS Pharmaceuticals/United States; Glaxo SmithKline/
United Kingdom

10/9/7 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2002 American Chemical Society. All rts. reserv.

136381448 CA: 136(25)381448j PATENT

Sequences of a novel human extracellular calcium sensing G
protein-coupled receptor sequence homolog fragment and uses in diagnosis,
therapy and drug screening

INVENTOR(AUTHOR): Xiao, Yonghong

LOCATION: Germany,

ASSIGNEE: Bayer Aktiengesellschaft

PATENT: PCT International ; WO 200238760 A2 DATE: 20020516

APPLICATION: WO 2001EP12923 (20011108) *US PV246981 (20001113)

10/9/8 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

136304110 CA: 136(20)304110r PATENT
Regulation of human secretin receptor-like GPCR
INVENTOR(AUTHOR): Kossida, Sophia
LOCATION: Germany,
ASSIGNEE: Bayer Aktiengesellschaft
PATENT: PCT International ; WO 200228898 A2 DATE: 20020411
APPLICATION: WO 2001EP11439 (20011004) *US PV238126 (20001006)

10/9/9 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

136032775 CA: 136(3)32775z PATENT
Cloning, sequencing and regulation of human LGR4-like G protein-coupled receptor
INVENTOR(AUTHOR): Ramakrishnan, Shyam
LOCATION: Germany,
ASSIGNEE: Bayer Aktiengesellschaft
PATENT: PCT International ; WO 200192297 A2 DATE: 20011206
APPLICATION: WO 2001EP6089 (20010529) *US PV207349 (20000530)

10/9/10 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

136032774 CA: 136(3)32774y PATENT
Cloning, sequencing and regulation of human isotocin-like G protein-coupled receptor
INVENTOR(AUTHOR): Ramakrishnan, Shyam
LOCATION: Germany,
ASSIGNEE: Bayer A.-G.
PATENT: PCT International ; WO 200192296 A2 DATE: 20011206

APPLICATION: WO 2001EP5965 (20010525) *US PV207224 (20000526)
PAGES: 92 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/00A

10/9/11 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

136001111 CA: 136(1)1111a PATENT
Human dopamine-like G protein-coupled receptor polynucleotides and
peptides, and reagents regulating DA-like GPCR function for use in treating
dysfunctions or diseases
INVENTOR(AUTHOR): Ramakrishnan, Shyam
LOCATION: Germany,
ASSIGNEE: Bayer Aktiengesellschaft
PATENT: PCT International ; WO 200187929 A2 DATE: 20011122
APPLICATION: WO 2001EP5559 (20010516) *US PV205195 (20000518)

10/9/12 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

136001109 CA: 136(1)1109f PATENT
Human galanin receptor-like G protein coupled receptor polynucleotides
and peptides, and reagents regulating galanin receptor-like GPCR function
for use in treating pathophysiological disorders
INVENTOR(AUTHOR): Ramakrishnan, Shyam
LOCATION: Germany,
ASSIGNEE: Bayer Aktiengesellschaft
PATENT: PCT International ; WO 200187930 A2 DATE: 20011122
APPLICATION: WO 2001EP5569 (20010516) *US PV205071 (20000518)

10/9/13 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 2002 American Chemical Society. All rts. reserv.

130048330 CA: 130(5)48330n PATENT
sequence and clinical diagnosis and therapeutic applications for human G

protein-coupled receptor similar to murine frizzled-6 gene

INVENTOR(AUTHOR): Hu, Erding; Zhu, Yuan

LOCATION: USA

ASSIGNEE: Smithkline Beecham Corp.

PATENT: European Pat. Appl. ; EP 882793 A2 DATE: 19981209

APPLICATION: EP 98304208 (19980528) *US 48240 (19970602) *US 987289
(19971209)

T/FULL/1-13

5/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2002 BIOSIS. All rts. reserv.

13054517 BIOSIS NO.: 200100261666

Localization of the melatonin-related receptor in the rodent brain and peripheral tissues.

AUTHOR: Drew J E(a); Barrett P; Mercer J G; Moar K M; Canet E; Delagrance P ; Morgan P J

AUTHOR ADDRESS: (a)Molecular Neuroendocrinology Group, Rowett Research Institute, Bucksburn, Aberdeen, AB21 9SB: jed@rri.sari.ac.uk**UK

JOURNAL: Journal of Neuroendocrinology 13 (5):p453-458 May, 2001

MEDIUM: print

ISSN: 0953-8194

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: Previous studies have provided a limited examination of the expression of the orphan melatonin-related receptor in the pituitary and hypothalamus of human and sheep and retinal tissue in the sheep. The present study reports evidence of conservation of expression in regions of the hypothalamus (dorsal medial hypothalamus, lateral hypothalamus, arcuate nucleus), the epithelial layer lining the third ventricle and the paraventricular thalamic nucleus of the mouse, rat and hamster. An extensive and detailed analysis of melatonin-related receptor mRNA expression in the mouse central nervous system and peripheral tissues is presented. Mapping the distribution throughout the entire mouse brain has revealed new sites of expression in a number of brain nuclei, including preoptic areas, parabrachial nuclei and widespread distribution in the olfactory bulb. Reverse transcriptase-polymerase chain reaction was performed with RNA isolated from peripheral tissues revealing expression of the melatonin-related receptor mRNA in the mouse kidney, adrenal gland, intestine, stomach, heart, lung, skin, testis and ovary. These

results suggest a conserved function in neuroendocrine regulation and a potential role in coordinating physiological responses in the central nervous system and peripheral tissues.

DESCRIPTORS:

MAJOR CONCEPTS: Endocrine System (Chemical Coordination and Homeostasis);
Nervous System (Neural Coordination)

BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata,
Animalia

ORGANISMS: mouse (Muridae)

ORGANISMS: PARTS ETC: arcuate nucleus--nervous system; brain--nervous
system; dorsal medial hypothalamus--nervous system; hypothalamus--
nervous system; lateral hypothalamus--nervous system; olfactory bulb
--nervous system; parabrachial nuclei--nervous system; peripheral
tissues; pituitary gland--endocrine system; preoptic area--nervous
system; retinal tissue--sensory system

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Mammals;
Nonhuman Mammals; Nonhuman Vertebrates; Rodents; Vertebrates

CHEMICALS & BIOCHEMICALS: melatonin-related receptor; melatonin-related
receptor messenger RNA

METHODS & EQUIPMENT: reverse transcriptase-polymerase chain reaction--
analytical method, polymerase chain reaction

MISCELLANEOUS TERMS: neuroendocrine regulation; psychological response
coordination

CONCEPT CODES:

17002 Endocrine System-General

10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines

17020 Endocrine System-Neuroendocrinology (1972-)

20004 Sense Organs, Associated Structures and Functions-Physiology and
Biochemistry

20504 Nervous System-Physiology and Biochemistry

BIOSYSTEMATIC CODES:

86375 Muridae

5/9/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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12649542 BIOSIS NO.: 200000403044

Chimeric melatonin mt1 and melatonin-related receptors: Identification of domains and residues participating in ligand binding and receptor activation of the melatonin mt1 receptor.

AUTHOR: Conway Shaun(a); Drew Janice E; Mowat Elaine S; Barrett Perry; Delagrangé Philippe; Morgan Peter J

AUTHOR ADDRESS: (a)Molecular Neuroendocrinology Group, Div. of Appetite and Energy Balance, Rowett Research Inst., Greenburn Rd., Bucksburn, Aberdeen, AB21 9SB**UK

JOURNAL: Journal of Biological Chemistry 275 (27):p20602-20609 July 7, 2000

MEDIUM: print

ISSN: 0021-9258

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT: Melatonin receptors bind and become activated by melatonin. The melatonin-related receptor, despite sharing considerable amino acid sequence identity with melatonin receptors, does not bind melatonin and is currently an orphan G protein-coupled receptor. To investigate the structure and function of both receptors, we engineered a series of 14 chimeric receptor constructs, allowing us to determine the relative contribution of each transmembrane domain to ligand binding and receptor function. Results identified that when sequences encoding transmembrane domains 1, 2, 3, 5, or 7 of the melatonin mt1 receptor were replaced by the corresponding domains of the melatonin-related receptor, the resultant chimeric receptors all displayed specific 2-(125I)iodomelatonin binding. Replacement of sequences incorporating transmembrane domains 4 or 6, however, resulted in chimeric receptors that displayed no detectable 2-(125I)iodomelatonin binding. The subsequent testing of a "reverse" chimeric receptor in which sequences encoding transmembrane domains 4 and 6 of the melatonin-related receptor were replaced by the corresponding melatonin mt1 receptor sequences identified specific

2-(125I)iodomelatonin binding and melatonin-mediated modulation of cyclic AMP levels. To further investigate these findings, site-directed mutagenesis was performed on residues within transmembrane domain 6 of the melatonin mt1 receptor. This identified Gly258 (Gly6.55) as a critical residue required for high affinity ligand binding and receptor function.

REGISTRY NUMBERS: 73-31-4: MELATONIN

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Methods and Techniques

BIOSYSTEMATIC NAMES: Cercopithecidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: COS-7 cell line (Cercopithecidae)

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Primates; Nonhuman Vertebrates; Primates; Vertebrates

CHEMICALS & BIOCHEMICALS: melatonin; melatonin mt-1 receptor--activation, ligand binding

METHODS & EQUIPMENT: site-directed mutagenesis--molecular genetic method; transfection--DNA transfer method, gene expression/vector techniques

CONCEPT CODES:

10060 Biochemical Studies-General

02506 Cytology and Cytochemistry-Animal

10064 Biochemical Studies-Proteins, Peptides and Amino Acids

BIOSYSTEMATIC CODES:

86205 Cercopithecidae

5/9/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2002 BIOSIS. All rts. reserv.

12214801 BIOSIS NO.: 199900509650

Genetic and transcription analysis in Rett syndrome.

AUTHOR: Manzati E(a); Bigoni S(a); Gualandi F(a); Scapoli C; Guarna M; Pini G; Zappella M; Muntoni F; Hajek G; Calzolari E(a); Ferlini A(a)

AUTHOR ADDRESS: (a)Istituto di Genetica Medica, Universita' di Ferrara,
Ferrara**Italy

JOURNAL: American Journal of Human Genetics 65 (4):pA478 Oct., 1999

CONFERENCE/MEETING: 49th Annual Meeting of the American Society of Human
Genetics San Francisco, California, USA October 19-23, 1999

SPONSOR: The American Society of Human Genetics

ISSN: 0002-9297

RECORD TYPE: Citation

LANGUAGE: English

DESCRIPTORS:

MAJOR CONCEPTS: Medical Genetics (Allied Medical Sciences); Molecular
Genetics (Biochemistry and Molecular Biophysics); Neurology (Human
Medicine, Medical Sciences)

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata,
Animalia

ORGANISMS: human (Hominidae)--Italian

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Humans;
Mammals; Primates; Vertebrates

DISEASES: Rett syndrome--behavioral and mental disorders, nervous system
disease

CHEMICALS & BIOCHEMICALS: total RNA; DNA; human host factor cell 1 gene
(Hominidae); human interleukin 9 receptor gene (Hominidae); human
melatonin-related receptor gene (Hominidae); human GABA-A
neurotransmitter receptor gene {human gamma-aminobutyric acid-A
neurotransmitter receptor} (Hominidae)

METHODS & EQUIPMENT: genetic analysis--analytical method, genetic method;
transcription analysis--analytical method

MISCELLANEOUS TERMS: Meeting Abstract; Meeting Poster

ALTERNATE INDEXING: Rett Syndrome (MeSH)

CONCEPT CODES:

03508 Genetics and Cytogenetics-Human

20501 Nervous System-General; Methods

00520 General Biology-Symposia, Transactions and Proceedings of
Conferences, Congresses, Review Annuals

BIOSYSTEMATIC CODES:

86215 Hominidae

5/9/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2002 BIOSIS. All rts. reserv.

11899542 BIOSIS NO.: 199900145651

Short communication: Assignment of the melatonin-related receptor to human chromosome X (GPR50) and mouse chromosome X (Gpr50).

AUTHOR: Gubitz Amelie K; Reppert Steven M(a)

AUTHOR ADDRESS: (a)Jackson 1226, Massachusetts General Hospital, Boston, MA
02114**USA

JOURNAL: Genomics 55 (2):p248-251 Jan. 15, 1999

ISSN: 0888-7543

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Recent efforts to clone further members of the melatonin receptor family have led to the identification of a novel G-protein-coupled receptor in human pituitary. This receptor, referred to as H9, is clearly related to high-affinity melatonin receptors yet unable to bind this hormone. We now report the cloning and expression of the cDNA encoding the H9 receptor in mice. The mouse clone encodes a protein of 591 amino acids that shares 74% amino acid identity with the human receptor and is unable to bind 2-(125I)iodomelatonin when transiently expressed in COS-7 cells. We also determined the chromosome loci of the human and mouse H9 receptor genes. Both genes were found to be X-linked: radiation hybrid mapping revealed that the human H9 gene (GPR50) is localized to Xq28. The mouse gene (Gpr50) was determined to lie in the proximal portion of chromosome X by means of interspecific backcross analysis. These loci might be relevant to genetically based neuroendocrine disorders.

DESCRIPTORS:

MAJOR CONCEPTS: Molecular Genetics (Biochemistry and Molecular Biophysics)

BIOSYSTEMATIC NAMES: Cercopithecidae--Primates, Mammalia, Vertebrata, Chordata, Animalia; Hominidae--Primates, Mammalia, Vertebrata, Chordata

, Animalia; Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: human (Hominidae); mouse (Muridae); Cos-7 cell line
(Cercopithecidae)

ORGANISMS: PARTS ETC: pituitary--endocrine system

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Humans;
Mammals; Nonhuman Mammals; Nonhuman Primates; Nonhuman Vertebrates;
Primates; Rodents; Vertebrates

DISEASES: neuroendocrine disorders--endocrine system disease, nervous
system disease

CHEMICALS & BIOCHEMICALS: cDNA {complementary DNA}; melatonin-related
receptor; H9--G-protein-coupled receptor; human GPR50 gene
(Hominidae)--melatonin-related receptor gene; mouse Gpr50 gene
(Muridae)--melatonin-related receptor

MOLECULAR SEQUENCE DATABANK NUMBER: AF065145--GenBank, amino acid sequence,
nucleotide sequence; U52219--GenBank, amino acid sequence, nucleotide
sequence

METHODS & EQUIPMENT: cloning--cloning method; interspecific backcross
analysis--analytical method; radiation hybrid mapping--gene mapping
method

MISCELLANEOUS TERMS: chromosome X

CONCEPT CODES:

03506 Genetics and Cytogenetics-Animal
03508 Genetics and Cytogenetics-Human
10060 Biochemical Studies-General
17002 Endocrine System-General
20501 Nervous System-General; Methods

BIOSYSTEMATIC CODES:

86205 Cercopithecidae
86215 Hominidae
86375 Muridae

5/9/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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11664800 BIOSIS NO.: 199800446531

The ovine melatonin-related receptor: Cloning and preliminary distribution and binding studies.

AUTHOR: Drew Janice E(a); Barrett Perry; Williams Lynda M; Conway Shaun; Morgan Peter J

AUTHOR ADDRESS: (a)Neuroendocrinology, Rowett Res. Inst., Greenburn Road, Bucksburn, Aberdeen AB21 9SB**UK

JOURNAL: Journal of Neuroendocrinology 10 (9):p651-661 Sept., 1998

ISSN: 0953-8194

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A melatonin-related receptor was cloned from an ovine genomic library. The sequenced gene has a similar structure to that of the melatonin receptor gene family and consists of two exons separated by an intron of approximately 3 kb. Exon 1 and exon 2 of the ovine melatonin-related receptor encode a protein of 575 amino acids which is 73.8% homologous to the human melatonin-related receptor and shows 40.9% homology with the ovine Mel1a melatonin receptor. COS-7 cells transiently expressing ovine melatonin-related receptors did not bind 2-(125I)iodomelatonin or 3H-melatonin. Reverse transcription-polymerase chain reaction (RT-PCR) and in situ hybridization studies revealed expression of the ovine melatonin-related receptor in the hypothalamus, pituitary, retina and retinal pigment epithelium. Furthermore, expression of the ovine melatonin-related receptor is shown to be coincident with Mel1a and 2-(125I)iodomelatonin binding in the pituitary and serotonin N-acetyl transferase (arylalkylamine N-acetyl transferase, AANAT) expression in the retina. Expression patterns and similarity with the melatonin receptor gene family suggest a role for this novel G protein-coupled receptor in control and regulation of endocrine function and retinal physiology.

REGISTRY NUMBERS: 93515-00-5: 2-iodomelatonin; 14158-31-7: iodine-125; 92941-56-5: serotonin N-acetyl transferase; 92941-56-5: arylalkylamine N-acetyl transferase

DESCRIPTORS:

MAJOR CONCEPTS: Endocrine System (Chemical Coordination and Homeostasis);

Molecular Genetics (Biochemistry and Molecular Biophysics); Nervous System (Neural Coordination)

BIOSYSTEMATIC NAMES: Cercopithecidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: COS-7 (Cercopithecidae)

ORGANISMS: PARTS ETC: exon; hypothalamus--nervous system; intron; pituitary--endocrine system; retina--sensory system; retinal pigment epithelium--sensory system

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animals; Chordates; Mammals; Nonhuman Mammals; Nonhuman Primates; Nonhuman Vertebrates; Primates; Vertebrates

CHEMICALS & BIOCHEMICALS: arylalkylamine N-acetyl transferase--retinal expression; ovine melatonin-related receptor--binding, cloning, distribution; ovine Mel1a melatonin receptor; serotonin N-acetyl transferase--retinal expression; tritiated-melatonin; 2-iodomelatonin --iodine-125 labeled

METHODS & EQUIPMENT: in-situ hybridization--analytical method; reverse transcription-polymerase chain reaction--DNA amplification method

MISCELLANEOUS TERMS: endocrine function--control, regulation; ovine genomic library

CONCEPT CODES:

17002 Endocrine System-General
10504 Biophysics-General Biophysical Techniques
10802 Enzymes-General and Comparative Studies; Coenzymes
20501 Nervous System-General; Methods
10060 Biochemical Studies-General

BIOSYSTEMATIC CODES:

86205 Cercopithecidae

5/9/6 (Item 6 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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10948065 BIOSIS NO.: 199799569210

The Mel-1a melatonin receptor gene is expressed in human suprachiasmatic nuclei.

AUTHOR: Weaver David R(a); Reppert Steven M

AUTHOR ADDRESS: (a)Lab. Developmental Chronobiol., Pediatric Service,
Massachusetts Gen. Hosp., Boston, MA 02114**USA

JOURNAL: Neuroreport 8 (1):p109-112

ISSN: 0959-4965

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The pineal hormone melatonin influences circadian rhythmicity in many vertebrate species. The circadian effects of melatonin in humans have led to its use to treat jet lag and circadian-based sleep disorders. Melatonin is thought to influence circadian rhythmicity by acting in the suprachiasmatic nuclei (SCN). The recent cloning of two melatonin receptor subtypes with high affinity for melatonin allows molecular analysis of melatonin receptors in human SCN. We report that Mel-1a receptor mRNA is detectable in neonatal human SCN by in situ hybridization. Mel-1b and melatonin-related receptor mRNAs were not detected. The presence of Mel-1a receptor mRNA in human SCN supports the hypothesis that the Mel-1a receptor is responsible for the circadian effects of melatonin in humans.

REGISTRY NUMBERS: 73-31-4: MELATONIN

DESCRIPTORS:

MAJOR CONCEPTS: Biosynchronization; Genetics; Nervous System (Neural Coordination)

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: human (Hominidae)

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; chordates; humans; mammals; primates; vertebrates

CHEMICALS & BIOCHEMICALS: MELATONIN

MISCELLANEOUS TERMS: Research Article; CIRCADIAN RHYTHM; EXPRESSION;
MEL1A MELATONIN RECEPTOR GENE; NERVOUS SYSTEM; SUPRACHIASMATIC NUCLEI

CONCEPT CODES:

03508 Genetics and Cytogenetics-Human

07200 Circadian Rhythms and Other Periodic Cycles

20504 Nervous System-Physiology and Biochemistry

BIOSYSTEMATIC CODES:

86215 Hominidae

5/9/7 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2002 BIOSIS. All rts. reserv.

10383220 BIOSIS NO.: 199699004365

Cloning of a melatonin-related receptor from human pituitary.

AUTHOR: Reppert Steven M(a); Weaver David R; Ebisawa Takashi; Mahle Cathy D
; Kolakowski Lee F Jr

AUTHOR ADDRESS: (a)Lab. Dev. Chronobiol., Massaschusetts General Hosp.,
Jackson 1226, Boston, MA 02114**USA

JOURNAL: FEBS Letters 386 (2-3):p219-224 1996

ISSN: 0014-5793

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: We have cloned an orphan G protein-coupled receptor from a human pituitary cDNA library using a probe generated by PCR. The cDNA, designated H9, encodes a protein of 613 amino acids that is 45% identical at the amino acid level to the recently cloned human Mel-1a and Mel-1b melatonin receptors. Structural analyses of the encoded protein and its gene, along with phylogenetic analysis, further show that H9 is closely related to the G protein-coupled melatonin receptor family. Unusual features of the protein encoded by H9 include a lack of N-linked glycosylation sites and a carboxyl tail of 300 amino acids long. H9 transiently expressed in COS-1 cells did not bind (125I)melatonin or (3H)melatonin. H9 mRNA is expressed in hypothalamus and pituitary, suggesting that the encoded receptor and its natural ligand are involved in neuroendocrine function.

REGISTRY NUMBERS: 176892-99-2: GENBANK-U52219

DESCRIPTORS:

MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Endocrine System

(Chemical Coordination and Homeostasis); Genetics; Membranes (Cell

Biology); Methods and Techniques; Nervous System (Neural Coordination)

BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata,

Animalia

ORGANISMS: Hominidae (Hominidae)

BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): animals; chordates; humans;

mammals; primates; vertebrates

CHEMICALS & BIOCHEMICALS: GENBANK-U52219

MOLECULAR SEQUENCE DATABANK NUMBER: amino acid sequence; molecular sequence

data; nucleotide sequence; ANALYTICAL METHOD GENBANK-U52219

MISCELLANEOUS TERMS: COMPLEMENTARY DNA; GENETICS; MESSENGER RNA;

NEUROENDOCRINE FUNCTION

CONCEPT CODES:

03508 Genetics and Cytogenetics-Human

10054 Biochemical Methods-Proteins, Peptides and Amino Acids

10062 Biochemical Studies-Nucleic Acids, Purines and Pyrimidines

10064 Biochemical Studies-Proteins, Peptides and Amino Acids

10506 Biophysics-Molecular Properties and Macromolecules

10508 Biophysics-Membrane Phenomena

17014 Endocrine System-Pituitary

17020 Endocrine System-Neuroendocrinology (1972-)

20501 Nervous System-General; Methods

20504 Nervous System-Physiology and Biochemistry

BIOSYSTEMATIC CODES:

86215 Hominidae

5/9/8 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2002 Inst for Sci Info. All rts. reserv.

07430847 Genuine Article#: 164WY Number of References: 9

Title: Assignment of the melatonin-related receptor to human chromosome X

(GPR50) and mouse chromosome X (Gpr50)

Author(s): Gubitzi AK; Reppert SM (REPRINT)

Corporate Source: MASSACHUSETTS GEN HOSP,SERV PEDIAT, LAB DEV

CHRONOBIOL/BOSTON//MA/02114 (REPRINT); MASSACHUSETTS GEN HOSP,SERV
PEDIAT, LAB DEV CHRONOBIOL/BOSTON//MA/02114; HARVARD UNIV,SCH
MED/BOSTON//MA/02114

Journal: GENOMICS, 1999, V55, N2 (JAN 15), P248-251

ISSN: 0888-7543 Publication date: 19990115

Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495

Language: English Document Type: ARTICLE

Geographic Location: USA

Subfile: CC LIFE--Current Contents, Life Sciences

Journal Subject Category: BIOTECHNOLOGY & APPLIED MICROBIOLOGY; GENETICS &
HEREDITY

Abstract: Recent efforts to clone further members of the melatonin receptor family have led to the identification of a novel G-protein-coupled receptor in human pituitary. This receptor, referred to as H9, is clearly related to high-affinity melatonin receptors yet unable to bind this hormone. We now report the cloning and expression of the cDNA encoding the H9 receptor in mice. The mouse clone encodes a protein of 591 amino acids that shares 74% amino acid identity with the human receptor and is unable to bind 2-[I-125]iodomelatonin when transiently expressed in COS-7 cells. We also determined the chromosome loci of the human and mouse H9 receptor genes. Both genes were found to be X-linked: radiation hybrid mapping revealed that the human H9 gene (GPR50) is localized to Xq28. The mouse gene (Gpr50) was determined to lie in the proximal portion of chromosome X by means of interspecific backcross analysis. These loci might be relevant to genetically based neuroendocrine disorders. (C) 1999 Academic Press.

Identifiers--KeyWord Plus(R): HUMAN XQ28; GENE

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- REPPERT SM, 1996, V386, P219, FEBS LETT

5/9/9 (Item 1 from file: 65)

DIALOG(R)File 65:Inside Conferences

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03887072 INSIDE CONFERENCE ITEM ID: CN040853091

Expression of MT1 and Melatonin Related Receptor (H9) in Adult Rat Testis

De Rienzo, G.; Aniello, F.; Ferrara, D.; Minucci, S.; Serino, I. ; D
istria, M.

CONFERENCE: International congress of Comparative Endocrinology;
Perspective in comparative endocrinology-14th

P: 1075-1080

Monduzzi Editore, 2001

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LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE EDITOR(S): Goos, H. J. T.

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DESCRIPTORS: comparative endocrinology; endocrinology; ICCE; IFCES; unity

5/9/10 (Item 1 from file: 71)

DIALOG(R)File 71:ELSEVIER BIOBASE

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01490276 2000162681

Chimeric melatonin and melatonin-related receptors: Identification of
domains and residues participating in ligand binding and receptor
activation of the melatonin mtnf 1 receptor

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Journal: Journal of Biological Chemistry, 275/27 (20602-20609), 2000,
United States

PUBLICATION DATE: July 7, 2000

CODEN: JBCHA

ISSN: 0021-9258

DOCUMENT TYPE: Article

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 36

Melatonin receptors bind and become activated by melatonin. The melatonin-related receptor, despite sharing considerable amino acid sequence identity with melatonin receptors, does not bind melatonin and is currently an orphan G protein-coupled receptor. To investigate the structure and function of both receptors, we engineered a series of 14 chimeric receptor constructs, allowing us to determine the relative contribution of each transmembrane domain to ligand binding and receptor function. Results identified that when sequences encoding transmembrane domains 1, 2, 3, 5, or 7 of the melatonin mtnf 1 receptor were replaced by the corresponding domains of the melatonin-related receptor, the resultant chimeric receptors all displayed specific 2-[sup 1sup 2sup 5I]iodomelatonin binding. Replacement of sequences incorporating transmembrane domains 4 or 6, however, resulted in chimeric receptors that displayed no detectable 2-[sup 1sup 2sup 5I]iodomelatonin binding. The subsequent testing of a 'reverse' chimeric receptor in which sequences encoding transmembrane domains 4 and 6 of the melatonin-related receptor were replaced by the corresponding melatonin mtnf 1 receptor sequences identified specific 2-[sup 1sup 2sup 5I]iodomelatonin binding and melatonin-mediated modulation of cyclic AMP levels. To further investigate these findings, site-directed mutagenesis was performed on residues within transmembrane domain 6 of the melatonin mtnf 1 receptor. This identified Gly²⁵⁸ (Gly⁶⁵⁵ .⁵⁵⁵) as a critical residue required for high affinity ligand binding and receptor function.

CLASSIFICATION CODE AND DESCRIPTION:

99 - General

5/9/11 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
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13979688 PASCAL No.: 99-0162912
Assignment of the melatonin-related receptor to human chromosome X
(GPRSO) and mouse chromosome X (Gpr50)

GUBITZ A K; REPPERT S M
Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital and Harvard Medical School, Boston,
Massachusetts 02114, United States

Journal: Genomics : (San Diego, CA), 1999, 55 (2) 248-251
ISSN: 0888-7543 Availability: INIST-21389; 354000074328270150
No. of Refs.: 9 ref.

Document Type: P (Serial) ; A (Analytic)
Country of Publication: United States
Language: English

Recent efforts to clone further members of the melatonin receptor family have led to the identification of a novel G-protein-coupled receptor in human pituitary. This receptor, referred to as H9, is clearly related to high-affinity melatonin receptors yet unable to bind this hormone. We now report the cloning and expression of the cDNA encoding the H9 receptor in mice. The mouse clone encodes a protein of 591 amino acids that shares 74% amino acid identity with the human receptor and is unable to bind 2-(¹SUP 2 ⁵I)iodomelatonin when transiently expressed in COS-7 cells. We also determined the chromosome loci of the human and mouse H9 receptor genes. Both genes were found to be X-linked: radiation hybrid mapping revealed that the human H9 gene (GPRSO) is localized to Xq28. The mouse gene (Gpr50) was determined to lie in the proximal portion of chromosome X by means of interspecific backcross analysis. These loci might be relevant to genetically based neuroendocrine disorders.

English Descriptors: Human; Mouse; Animal model; Complementary DNA;
Nucleotide sequence; Homology; X-Chromosome; Genetic mapping; Multigene
family; Membrane receptor; Pituitary gland; Melatonin
Broad Descriptors: Rodentia; Mammalia; Vertebrata; Rodentia; Mammalia;

Vertebrata; Rodentia; Mammalia; Vertebrata

French Descriptors: Homme; Souris; Modele animal; DNA complementaire;
Sequence nucleotide; Homologie; Chromosome X; Carte genetique; Multigene;
Recepteur membranaire; Hypophyse; Melatonine; Gene GPR50; Gene Gpr50

Classification Codes: 002A04C02

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5/9/12 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
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12884464 PASCAL No.: 97-0147497

The Mel SUB 1 SUB a melatonin receptor gene is expressed in human
suprachiasmatic nuclei

WEAVER D R; REPPERT S M

Laboratory of Developmental Chronobiology, Pediatric Service,
Massachusetts General Hospital, Boston, MA 02114, United States; Department
of Pediatrics and Program in Neuroscience, Harvard Medical School, Boston,
MA 02115, United States

Journal: Neuroreport : (Oxford), 1996, 8 (1) 109-112

ISSN: 0959-4965 Availability: INIST-22534; 354000062863720230

No. of Refs.: 22 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: United Kingdom

Language: English

THE pineal hormone melatonin influences circadian rhythmicity in many
vertebrate species. The circadian effects of melatonin in humans have led
to its use to treat jet lag and circadian-based sleep disorders. Melatonin
is thought to influence circadian rhythmicity by acting in the
suprachiasmatic nuclei (SCN). The recent cloning of two melatonin receptor
subtypes with high affinity for melatonin allows molecular analysis of
melatonin receptors in human SCN. We report that Mel SUB 1 SUB a receptor

mRNA is detectable in neonatal human SCN by in situ hybridization. Mel SUB 1 SUB b and melatonin-related receptor mRNAs were not detected. The presence of Mel SUB 1 SUB a receptor mRNA in human SCN supports the hypothesis that the Mel SUB 1 SUB a receptor is responsible for the circadian effects of melatonin in humans.

English Descriptors: Circadian rhythm; Suprachiasmatic nucleus; Gene expression; Melatonin; Hormonal receptor; Human

Broad Descriptors: Biological rhythm; Hypothalamus; Brain (vertebrata); Central nervous system; Pineal hormone; Rythme biologique; Hypothalamus; Encephale; Systeme nerveux central; Hormone epiphysaire; Ritmo biologico; Hipotalamo; Encefalo; Sistema nervioso central; Hormona epifisaria

French Descriptors: Rythme circadien; Noyau suprachiasmatique; Expression genique; Melatonine; Recepteur hormonal; Homme; Recepteur melatonine Mel 1a

Classification Codes: 002A16F

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5/9/13 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

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134161450 CA: 134(12)161450x PATENT

MRR gene, cDNA, and protein, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

INVENTOR(AUTHOR): White, David

LOCATION: USA

ASSIGNEE: Millennium Pharmaceuticals, Inc.

PATENT: PCT International ; WO 200109383 A2 DATE: 20010208

APPLICATION: WO 2000US20524 (20000728) *US PV146614 (19990730)

PAGES: 107 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;

CA; CH; CN; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR;
HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA;
MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL;
TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU;
TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW
; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE;
BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

SECTION:

CA214011 Mammalian Pathological Biochemistry

CA201XXX Pharmacology

CA203XXX Biochemical Genetics

IDENTIFIERS: gene protein cDNA MRR bone related disorder diagnosis, G
protein coupled receptor MRR bone related disorder

DESCRIPTORS:

Cerebrospinal fluid...

anal.; MRR gene, cDNA, protein and antibodies, and methods for
prognostication, diagnosis, prevention, and treatment of bone-related
disorders

Liposomes...

as artificial membrane, drug screening using; MRR gene, cDNA, protein
and antibodies, and methods for prognostication, diagnosis, prevention,
and treatment of bone-related disorders

Erythrocyte...

cell membrane, re-sealed, as artificial membrane, drug screening using;
MRR gene, cDNA, protein and antibodies, and methods for
prognostication, diagnosis, prevention, and treatment of bone-related
di

Prognosis...

disorder; MRR gene, cDNA, protein and antibodies, and methods for
prognostication, diagnosis, prevention, and treatment of bone-related
disorders

Cell membrane...

erythrocyte, re-sealed, as artificial membrane, drug screening using;
MRR gene, cDNA, protein and antibodies, and methods for
prognostication, diagnosis, prevention, and treatment of bone-related
diso

Kidney,disease...

failure, chronic; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

cDNA sequences...

for MRR proteins of human, rat and mouse; MRR gene, cDNA, and protein, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Diagnosis...

genetic, disorder; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Mutation...

in MRR gene, detection of; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Animal cell...

including human, drug screening using; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Disease models...

mammal, transgenic; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Neoplasm...

metastasized to bone tissue; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Leg...

mouse, MRR mRNA expression in embryo limb bone precursors; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Embryo, animal...

mouse, MRR mRNA expression in vertebral and limb bone precursors of; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorder

G protein-coupled receptors...

MRR (melatonin-related receptor); MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Drug screening...

MRR antagonists and enhancers; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

mRNA...

MRR, difference in expression in normal and afflicted tissues; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Blood analysis... Bone,disease... Bone,neoplasm... Cushing's syndrome...

Drugs... Gene therapy... Hyperparathyroidism... Hyperthyroidism...

Molecular cloning... Osteomalacia... Osteoporosis... Ribozymes...

MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Mouse... Rat...

Mrr gene from; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Genetic polymorphism...

MRR gene, identifying; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Antibodies... Antisense oligonucleotides... Gene,animal...

MRR; MRR gene, cDNA, protein and antibodies, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

DNA sequences...

of MRR gene of human; MRR gene, cDNA, and protein, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Protein sequences...

of MRR proteins of human, rat and mouse; MRR gene, cDNA, and protein, and methods for prognostication, diagnosis, prevention, and treatment of bone-related disorders

Bone,disease...

 Paget's; MRR gene, cDNA, protein and antibodies, and methods for
 prognostication, diagnosis, prevention, and treatment of bone-related
 disorders

Bone...

 tissue, anal.; MRR gene, cDNA, protein and antibodies, and methods for
 prognostication, diagnosis, prevention, and treatment of bone-related
 disorders

Spinal column...

 vertebra, mouse, MRR mRNA expression in embryo; MRR gene, cDNA, protein
 and antibodies, and methods for prognostication, diagnosis, prevention,
 and treatment of bone-related disorders

CAS REGISTRY NUMBERS:

179096-08-3 324832-39-5 325178-97-0 amino acid sequence; MRR gene, cDNA,
 and protein, and methods for prognostication, diagnosis, prevention,
 and treatment of bone-related disorders

176892-98-1 176892-99-2 201924-20-1 325178-98-1 nucleotide sequence;
 MRR gene, cDNA, and protein, and methods for prognostication,
 diagnosis, prevention, and treatment of bone-related disorders

?

?b 411

04sep02 14:04:43 User300306 Session D431.5

\$0.81 0.252 DialUnits File155

\$0.81 Estimated cost File155

\$2.67 0.297 DialUnits File73

\$2.67 Estimated cost File73

OneSearch, 2 files, 0.549 DialUnits FileOS

\$0.43 TELNET

\$3.91 Estimated cost this search

\$58.60 Estimated total session cost 5.370 DialUnits

File 411:DIALINDEX(R)

DIALINDEX(R)

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- 1 76: Life Sciences Collection_1982-2002/Aug

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- 1 352: Derwent WPI_1963-2002/UD,UM &UP=200256
- 1 357: Derwent Biotech Res._1982-2002/June W1